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प्राधिकार से प्रकाशित
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No. 45] NEW DELHI, SATURDAY, NOVEMBER 10, 1990 (KARTIKA 19, 1912)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE PATENTS AND DESIGNS

Calcutta, the 10th, November 1990

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Telegraphic address "PATOFFICE".

Patent Office Branch,
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Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),
"NIZAM PALACE", 2nd M.S.O. Bldg.,
5th, 6th and 7th Floor,
234/4, Acharya Jagdish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

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पेटेंट कार्यालय

एजन्स तथा अभिकल्प

कलकत्ता, दिनांक 10 नवम्बर 1990

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,
तीसरा तल, लोअर परेल (पश्चिम),
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोवा,
डमन तथा दिव एवं दादरा और नगर हवेली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,
इकाई सं० 401 से 405, तीसरा तल,
नगरपालिका बाजार भवन,
सरस्वती मार्ग, करोल बाग,
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा
उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,

61, वालाजाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र
पाण्डिचेरी, लक्षद्वीप, मिनिक्ॉय तथा एमिनिविदि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय
भवन 5, 6 तथा 7वां तल,
234/4, आचार्य जगदीश बोस रोड,
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—“पेटेंट्स”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी
आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल
उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त
कार्यालय में नियंत्रक को भुगतान योग्य धनादेश अथवा डाक आदेश या जहां
उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को
भुगतान योग्य बैंक ड्राफ्ट अथवा चेक द्वारा की जा सकती है।

Registration of Patent Agent

The following person has been registered as Patent Agent :

Shri A.R. Holla,
64, III Main Road,
Vijayanagar,
Bangalore—560 040.

THE PATENT OFFICE

Calcutta 10th November, 1990

APPLICATION FOR PATENTS FILED AT THE HEAD
OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD,
CALCUTTA-20.

The dates shown in the crescent brackets are the dates claimed
Under Section 135, of the Patents Act 1970.

25th September, 1990

830/Cal/90 Commodore-Amica Inc. Apparatus for reading a
plurality of input data bits transmitted serially from a
resource memory.
[Divisional date 17th July, 1987]

831/Cal/90 B.V. Optische Industrie “De Oude Delft”. Method for
manufacturing a correction mask for an image inten-
sifier tube of the proximity-focus type having an oblong
cathode and anode, and also a method for correcting an
image intensifier tube.

26th September, 1990

832/Cal/90 American Cyanamid Company. Enhancement of por-
cine somatotropin activity.

28th September, 1990

833/Cal/90 American Home Products Corporation. Fat composi-
tion for infant formulas.
(Convention date 13th December, 1989; No. 3988/89;
Ireland)

1st October, 1990

834/Cal/90 The Babcock & Wilcox Company. Low pressure drop
steam/water conical cyclone separator.

835/Cal/90 Arabinda Kar. Method and system for air injection in a
water like for oxidation purposes.

836/Cal/90 E.I. Du Pont De Nemours and Company. Yttrium and
rare earth compounds catalyzed lactone
polymerization.

837/Cal/90 Staedler & Uhl. Combing element for spinning
machines, in particular a needle or stamped sawtooth
element.

4th October, 1990

838/Cal/90 Uebel Engines Pty. Ltd. Rotary piston machine.
(Convention date October 04, 1990; No. PJ 6704/89; Aus-
tralia)

- 839/Cal/90 Uebel Engines Pty. Ltd. Rotary piston machine. (Convention date October 04, 1990; No. PJ 6703/89; Australia)
- 840/Cal/90 Deutsche Thomson-Brandt GmbH. Recorder with a winding and tape drive.
- 841/Cal/90 Deutsche Thomson-Brandt GmbH. Mos longic in bicos circuits.
- 842/Cal/90 E.I. Du Pont De Nemours & Company. Fire extinguishing composition and process.
- 843/Cal/90 E.I. Du Pont De Nemours and Company. Fluorocarbon purification process.
- 844/Cal/90 E.I. Du Pont De Nemours and Company. Ternary Azeotropic compositions of 1, 1-Dichloro-1, 2-Difluoroethane and Trans-1, 2-Dichloroethylene, with methanol, ethanol or isopropanol.
- 845/Cal/90 General Electric Company. Free standing diamond sheet and method and apparatus for making same.
- 846/Cal/90 Keystone International Holdings Corp. Stop cock for a liquid container.
- 847/Cal/90 Quebec Metal Powders. Ltd. Method of making segregation-free metallurgical powder blends using polyvinyl pyrrolidone binder.
- 848/Cal/90 Samsung Electron Devices Co. Ltd. Tension band and cathode ray tube fastened therewith.
- 849/Cal/90 Sri Parthasarathi Bhattacharya, Sri Satyahari Dey, Smt. (Dr.) Nilanjana Das and Sri (Dr.) Bimal Chandra Bhattacharya. Newly developed natural media for plant tissue culture system named PSNB.

5th October, 1990

- 850/Cal/90 Meneil-Ppc, Inc. Tampon, especially for feminine hygiene and process and apparatus for producing the tampon.
- 851/Cal/90 Great Lakes Chemical Corporation. Fire extinguishant compositions, methods and systems utilizing bromodifluoromethane.
- 852/Cal/90 E.I. Du Pont De Nemours and Company. Extrusion process for difficulty-melt-processible polymers.
- 853/Cal/90 E.I. Du Pont De Nemours and Company. Stabilized Azeotrope-Like Compositions of 1, 1-Dichloro-2, 2, 2-Trifluoroethane and 1, 1-Dichloro-1-Fluoroethane.
- 854/Cal/90 E.I. Du Pont De Nemours and Company. A polymer composition containing and extrusion processing aid comprising a fluorocarbon elastomer and vinylidene fluoride.
- 855/Cal/90 E.I. Du Pont De Nemours and Company. Improved process for melt extrusion of polymers.

Applications for patents filed at the Patent Office Branch, Municipal Market Building, IIIrd Floor, Karol Bagh, New Delhi-110005

10th September, 1990

- 899/Del/90 AEG Westinghouse Industrial Automation Corporation, "A method and apparatus for the optimization of thyristor power supply transport time delay".
- 900/Del/90 Sah Industrial Research Institute, "Double channel system in regenerative pump for clear, cold fresh water".

- 901/Del/90 Exxon Chemical Patents Inc. "A process for preparing distillate fuel additive compounds". (Convention date 24th September, 86 & 17th August, 87) (U.K.) [Divisional date 18th September, 87].

- 902/Del/90 The B.F. Goodrich Co, "Dispersant system for making polyvinyl chloride which produces low color chlorinated polyvinyl chloride".

- 903/Del/90 Exxon Chemical Patents Inc. "Elastomeric ethylene copolymers for hot melt adhesives".

11th September, 1990

- 904/Del/90 Govind Singh, "A system for automatic pumping and stopping water in overhead and underground water tanks".

- 905/Del/90 Aprampar Singh, "Gravity machine".

- 906/Del/90 Council of Scientific & Industrial Research, "A process for the preparation of a diode having negative resistance characteristics useful for microwave applications and high speed switching and the like".

- 907/Del/90 Council of Scientific & Industrial Research, "An improved process for the preparation of hydroxy-phenylpropanolamine".

- 908/Del/90 Mohammad Shakir Qidwai, "A device of pump for lifting water".

- 909/Del/90 Mohammad Shakir Qidwai, "A water lifting pump".

- 910/Del/90 Vidyadhi Nanduri, "A plasma ARC heater".

- 911/Del/90 Luis Carlos Gomez, "Method and solid material body for the purification of fluids such as water, aqueous fluids and liquid fuels".

- 912/Del/90 Dynavac Maschinenbau GMBH, "Device for the steam treatment of leather and similar flat materials".

- 913/Del/90 Poelain Hydraulics, "Mechanism, motor or pump, incorporating pistons supporting rollers for abutment of said pistons on a cam".

- 914/Del/90 Wilhelm Schuster, "Arching mechanism".

12th September, 1990

- 915/Del/90 Walter D. Somerville, "Ophthalmic device".

13th September, 1990

- 916/Del/90 DE Beers Industrial Diamond Division (Proprietary), Ltd "Gemstone polishing table".

- 917/Del/90 De Beers Industrial Diamond Division (Proprietary), Ltd "Dop".

14th September, 1990

- 918/Del/90 Alenax Corporation, "A propulsion mechanism for a lever propelled bicycle". [Divisional date 22nd January, 1986].

- 919/Del/90 C.R. Bard, Inc, "Multilaminar coiled film catheter construction".

OPPOSITION PROCEEDINGS

(1)

An Opposition have been entered by Jimmy Sorab Canteenwalla and Subbird Seals and Plastics Private Limited, Bombay, Maharashtra to the grant of Patent on Application No. 166305 made by Gurunath Vinayak Raut.

(2)

The Opposition entered by the English Electric Company of India Limited, Madras to the grant of a Patent on Application No. 155176 made by M/a Mitsubishi Denki Kabushiki Kaisha, Japan as notified in the Gazette of India, Part III, Section 2 dated the 26th October, 1985 has been dismissed and ordered that a Patent to be sealed.

PATENT SEALED

165827 165829 165832 165833 165835 165924 165928 165929 165932
165933 165934 165935 165937 165938 165961 165976 165991 165993
165994 165995 165997 166001 166005 166011 166030 166032 166034
166035 166042 166048 166057 166062 166063 166064 166066 166067
166071 166076 166082 166083 166084 166091 166114 166117 166121
166122 166126 166127 166138 166139 166140.

CAL—20.

DEL—18.

MAS— 7.

BOM— 6.

AMENDMENT PROCEEDING UNDER SECTION 57.

(1)

Notice is hereby given that the Indian Petro-Chemicals Corporation Limited, a Government of India Company incorporated under the Companies Act, 1956 of P.O. Petrochemicals, District Vadodara-391346, Gujarat, India has been made an application under section 57 of the Patents Act, 1970 for amendment of address for service in application form in respect of patent application No. 54/BOM/1988 for "A process for the preparation of an improved catalytic composite material useful for the alkylation of toluene with methanol to xylene". The application for amendment and proposed amendments can be inspected free of charge at the Patent Office Branch, Toddi Estate, IIIrd Floor, Sun Mill Compound, Lower Parel, Bombay-400013, on any working day during the usual office hours or copies of the same can be had on payment of usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form-30 along with full written statement within three months from the date of this notification of the Patent Office Branch, Bombay.

If the full written statement of opposition is not filed with the notice of opposition, it shall be left within one month from the date of filing the said notice of opposition.

(2)

Notice is hereby given that *Amsted Industries Incorporated*, 3700, Prudential Plaza, Chicago, Illinois-60601, U.S.A. have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their application for Patent No. 166562 for "PLASTIC FILLED WIRE ROPE WITH STRAND SPACER". The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

(3)

Proposed amendments under section 57 in respect of Patent No. 166347 (851/MAS/85) as advertised in the Gazette of India dated 9-6-90 have been allowed.

(4)

Proposed amendments under section 57 in respect of Patent No. 165608 (644/MAS/87) as advertised in the Gazette of India dated 9-6-90 have been allowed.

(5)

Notice is hereby given that *CROSBY VALVE & GAGE COMPANY*, 43, Kendrick Street, Wrentham, Massachusetts-02093, U.S.A. have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their application for Patent No. 166816 for "A PILOT OPERATED PRESSURE RELIEF VALVE SYSTEM". The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

(6)

Notice is hereby given that *RWE-DEA Aktiengesellschaft für Mineral- und Chemie, of Überseering*, 40, 2000, Hamburg 60, Federal Republic of Germany, have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their application for Patent No. 167216 for "A PROCESS FOR TREATING A STRONGLY ACIDIC CATION EXCHANGE MATERIAL FOR USE AS A LONG LIFE CATALYST". The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

(7)

Notice is hereby given that *TAKEDA CHEMICAL INDUSTRIES Ltd.*, 27, Dashmachi, 2-Chome, Higashi-Ka, Osaka-541, Japan, a Japanese Company, have made an application under Section 57 of the Patents Act, 1970, for amendment of application and specification of their application for Patent No. 166819 for "A process for producing a stabilized solid insecticide composition". The amendments are by way of correction. The application for amendments and the proposed amendments can be inspected free of charge at the Patent Office Branch, 61, Wallajah Road, Madras-600 002 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a Notice of Opposition on prescribed Form-30 within 3 months from the date of the notification at the Patent Office, Madras-2. If the Written Statement of Opposition is not filed with the Notice of Opposition it shall be left within one month from the date of filing the said Notice.

RENEWAL FEES PAID

146224 146280 146307 147262 147448 147659 147754 148367 148685
149028 149107 149108 149198 149212 149218 149228 149324 150042
150213 150329 150449 150928 150955 150994 151001 151121 151372
151714 151763 151769 151917 152112 152413 152428 152459 152658
153134 153149 153175 153273 153289 153448 153873 153882 153944
153988 153989 154136 154137 154229 154261 154592 154771 154871
154902 155003 155036 155216 155242 155432 155461 155842 156008
156092 156243 156301 156338 156363 156522 156553 156613 156660
156713 156714 156870 157037 157080 157118 157199 157417 157555
157817 157837 158386 158387 158390 158414 158600 158601 158714
158893 159423 159425 159628 159630 159631 159725 160247 160643
160646 160713 160719 160854 160871 160928 161196 161197 161393
161657 161674 161684 161685 161723 161727 161777 161928 161993
162104 162106 162118 162137 162190 162203 162316 162394 162602
162612 162724 162767 162829 162845 162886 162889 162965 163017
163070 163084 163242 163247 163379 163638 163721 163731 163760
163798 163805 163997 164080 164164 164233 164379 164534 164598
164680 164761 164917 164933 164956 165068 165108 165138 165139
165198 165307 165310 165430 165490 165497 165539 165540 165629
165630 165640 165742 165846 165981 166085 166089.

CESSATION OF PATENTS

145250 153576 153970 153971 153972 160393 160394 161529 161819
161955 163684 150855 151025 161927 163324 164511 165128.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कमी भी नियंत्रक, एकस्य को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

“प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप है।”

नीचे सूचीगत विनिर्देशों की सीमित संख्या में मुद्रित प्रतियाँ, भारत सरकार भुक्त हिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएँ तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कामजों को जोड़कर उसे 4 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl. : 129 J G.

167481

Int. Cl.⁴ : E 01 B 5/00.

METHOD FOR STRAIGHTENING A STEEL RAILWAYS RAIL AND RAILS SO STRAIGHTENED.

Applicant : SACILOR OF 6 RUE DE WENDEL, F 57700 HAYANGE, FRANCE, A FRENCH COMPANY.

Inventors : RAYMOND YVES DEROCHÉ, YVES BOURDON & ANDRÉ FAESSEL.

Application for the Patent No. 29/Del/83, filed on 17th January, 1983.

Appropriate Office for Opposition Proceedings (Rule No. 4, Patent Rule 1972), Patent Office Branch, New Delhi-5.

8 Claims

A method for the straightening of a steel railways rail to provide a straightened rail from which substantially all residual stresses have been removed which comprises subjecting said rail to a tensile stress in excess of the conventional 0.2% offset yield strength of the steel up to a stress value which effects total plastic deformation of the entire rail.

Compl. Specn. 34 Pages.

Drgs nil.

Ind. Cl. : 130F & 141B & D.

167482

Int. Cl. : C22B 23/04.

A PROCESS FOR THE RECOVERY OF NICKEL AND COBALT FROM COPPER CONVERTER SLAG OR THEIR OXIDIC ORES.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1 INDIA AND INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : BIJOY KUMAR SATAPATHY, PARTHA SARATHI DUTTA, DIPENDRA NARAYAN DEY & PRAFULLA KUMAR JENA.

Application for the Patent No. 371/Del/86 filed on 25th April, 1986.

Appropriate office for Opposition Proceedings (Rule 4, Patent Rule 1972), patent Office Branch, New Delhi-110005.

6 Claims

A process for the recovery of nickel and cobalt from copper converter slag or their oxidic ores which comprises mixing the slag or the oxidic source with a chloridising agent and a solid reductant, such as herein described subjecting the mixture to segregation roasting by heating under inert atmosphere at a temperature range of 600—800°C for 15—90 minutes so as to get the copper deposited on the surface of the reductant cooling the resultant mass under same inert atmosphere, separating the segregated metallic copper by sieving through an appropriate sieve of size, leaching the slag left behind with ammonia and ammonium carbonate solution to separate the residual copper, further leaching the copper free residue with dilute sulphuric acid under ambient temperature and pressure for a period of 15 to 90 minutes to recover the nickel and cobalt values from the slag and separating the nickel and cobalt values by known methods.

Comp. Specn. 11 Pages.

Ind. Cl. : 206B

167483

Int. Cl. : H04 J 1/00.

SYSTEM FOR ESTABLISHING WIDE BAND CONNECTION IN A SWITCHING NETWORK.

Applicant : TELEFONAKTIEDOLACET LM ERICSSON OF S-126 25 STOCKHOLM, SWEDEN, A SWEDISH COMPANY.

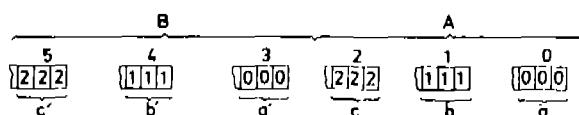
Inventor : STIG RAONAR EMANUEL JONSSON.

Application for Patent No. 464/Del/86 filed on 27th May, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules 1972), Patent Office Branch, New Delhi-110005.

5 Claims

System for establishing a wide band connection in a switching network (G), in a telecommunication equipment operating with pulse code modulation and time division multiplexing, where the connection comprises two or more channels, characterized in that a marking means (M), including marking generating registers (R1, R2, R3) each having control signal input is connected to corresponding outputs of counter (CNT) and further control signal inputs connected to a clock signal source, the output of each register being connected to corresponding inputs of an OR-circuit (OR), the output of which also being the output of said marking means (M) and connected to an input of a selector means (V1) a further input of which being connected to a line (L), the output of said selector means being connected to the input of said switching network (G) through a line L, a third input of said selector means (V1) being connected to an output of a control means (S) including a control order memory (M) having input connected to the output of a writing selector means (V2) and the output connected to a reading selector means (V3) having an input connected to the output of a channel counter (K), a scanning means (AO) having detecting inputs of a selector means (V4) connected to the output of the switching network (G) through a line L1, said scanning means including a control part (SD) and a detection part (DE), said control part including an order memory (M1) having control outputs connected to an input of said selector means (V4) through a further selector means (V4), a channel counter (K1) having control outputs connected to inputs of said further selector means (V4), said control part (SD) having an output (III) connected to an input of an equalising means (U0) and an output (IV) connected to detecting inputs of said detection part (DE), where each input corresponds to a part containing of an AND-circuit (OG) the output of which being connected to the input of a register (REG) and to the input of a flip-flop (V), a further of each register being connected to the output of said channel counter (K1), the output of said register being connected to the input of a corresponding memory (SO-S2), the outputs of a first and a second flip-flop (V) being connected to the inputs of a first AND-gate +0, the output of said second and third flip-flop (V) being connected to the inputs of a second AND-gate +1 and the output of said third and first flip-flop (V) being connected to the inputs of a third AND-gate +2, the output of a said AND-gates (+0 — +2) being connected to outputs (AO1) in turn connected to inputs (U01) of said equalising means (U0) which means contains a further channel counter (K2) controlling a further selector means (V5) connected to the outputs of a memory (M1) the inputs of which being connected to the outputs of said scanning means (AO), said selector means (V5) also being connected to an input of another selected means (V6) having a second input connected to the output of said control part (SD) through a delay register (RE) and a third input directly connected to the output of said control part (SD).



Compl. Specn. 16 Pages.

Drgs. Sheets 2.

Ind. Cl. : 141 A & D.

167484

Int. Cl. : C22B 1/14.

AN IMPROVED PROCESS FOR COLD PELLETIZATION OF CHROME ORE FINE AND CONCENTRATES.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1, INDIA AND INDIAN REGISTERED BODY, INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : JITENDRANATH MOHANTY, SAROJ KUMAR PATNAIK, ANIL KANTA TRIPATHY, DIPENDRA NARAYAN DEY & PRAFULLA KUMAR JENA

Application for Patent No. 580/Del/86 filed on 1st July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972), Patent Office Branch, New Delhi-5.

6 Claims

An improved process for the cold pelletization of chrome ore fines and concentrates which comprises crushing, grinding and serving the ores and concentrates, to various particle sizes, characterised in that, spraying the ground ores and concentrates with a binder magnesium ligno sulfonate having.

Solids—60-65% consisting of

Combined Sulfur—6-7%

Combined MagO. 6—10%

Tannin—13—16%

Sugar—6—9%

Lignin—25—30% and remaining water and curing the pellets thus formed by known methods.

Compl. Specn. 7 Pages.

Ind. Cl. : 195 D E.
Int. Cl. : F16K 15/00.

167485

A GAS LIFT VALVE FOR USE IN OIL WELLS.

Applicant : OIL & NATURAL GAS COMMISSION.

Inventors : VIRENDRA KUMAR GOEL, KUNDAN LAL GOYAL, PRABH JEET SINGH, ASHOK KUMAR & JAGDISH PRASAD SHARMA.

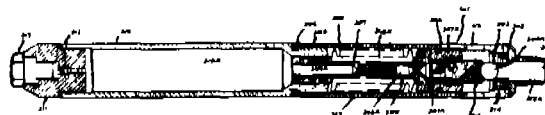
Application for Patent No. 750/Del/86 filed on 20th August 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patent Rule, 1972), Patent Office Branch, New Delhi-110005.

6 Claims

A gas lift valve for use in oil wells, comprising main valve housing having inlet end and an outlet end, (315) characterised in that charging means (312) having a valve provided at the said inlet end for introducing pressurized gas into the chamber (310A) of valve dome (310) having a valve holder (311) at one end and a bellow housing (307) at the said opposite end, said valve dome (310) having a skirt (310B) at the said opposite and extending into bellow housing (307), a pressurized gas being introduced into the chamber (310A) of said valve dome (310) through said charging means, (312) a plug ball (304) secured to a bellow (300) through a valve stem (305) such said that

pressurized gas within said bellow (308) displaces the plug ball (304) towards a seat, (302) a secondary inlet (316) provided with said main valve housing for introduction of a working gas, a check valve (108) for checking or restraining the flow of working gas, secured to said outlet and (315) such that when the working gas enters, the ball is displaced or moved away from its seat, (302) the working gas enters into the check valve (108) and flows through the outlet (109) of the said check valve.



Compl. Specn. 7 Pages.

Drg. 1 Sheet.

Ind. Cl. : 123
Int. Cl. : C07 C-126/10 & C08 J-06.

167486

A PROCESS FOR TREATING UREA GRANULES WITH A UREA MELT AS LIQUID COATING MATERIAL IN A FLUIDIZING BED TO OBTAIN COATED UREA GRANULES.

Applicant : TOYO ENGINEERING CORPORATION, A JAPANESE COMPANY, OF 2-5, KASUMIGASEKI 3-CHOME, CHIYODAKU, TOKYO, JAPAN.

Inventors : TETSUZO HONDA & KIMIKAZU KIDO.

Application for the Patent No. 809/Del/86 filed on 12th September, 1986.

Appropriate Office for Opposition proceedings (Rules 4, Patent Rule, 1972), Patent Office Branch, New Delhi-110005.

3 Claims

A process for treating urea granules with urea melt as a coating material in a fluidizing bed to urea obtain coated granules which comprises forming spouting beds of urea granules using a spouting gas of the kind such as herein described and coating the granules in said spouting bed by spraying said granules with said urea melt coating material to obtain coated urea granules characterised by.

Injecting into a fluidizing bed of said urea granules having a depth of 0.10 to 1.00 m in a static state and 0.30 to 1.50 m in the fluidised state said gas stream of the kind such as herein described to form spouting beds of said granules at a height in the range of from 2 to 10 meters from said fluidised bed, said gas stream being fed at a spouting velocity of from 5 to 50 m/sec. and a flow rate of from 250 to 10,000 Nm³/hour.

Spraying said spouting bed of granules with said urea melt-coating material at a spray angle of from 30 to 80°.

Compl. Specn. 22 Pages.

Drg. 1 Sheet.

Ind. Cl. : 32 F1 (a)
Int. Cl. : C 07 C 101/00.

167487

PROCESS FOR THE PREPARATION OF ESTERS.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

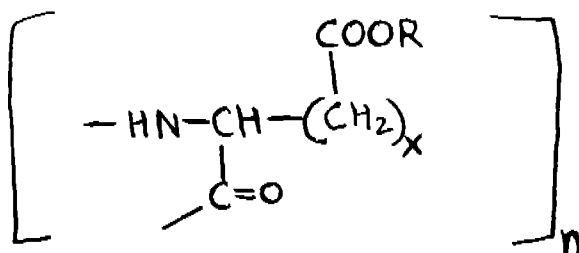
Inventors(s) : NEERJA PANT & HARI SHANKAR GARG & DEWAN SINGH BHAKUNI & NARENDRA KUMAR GARG & SANTOSH RANJAN DAS & MANOJIT MOHAN DHAR.

Application for the Patent No. 853/Del/86, filed on 26th September, 1986.

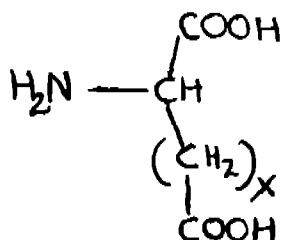
Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule, 1972), Patent Office Branch, New Delhi-110005.

11 Claims

A process for the preparation of esters having the formula (VI)

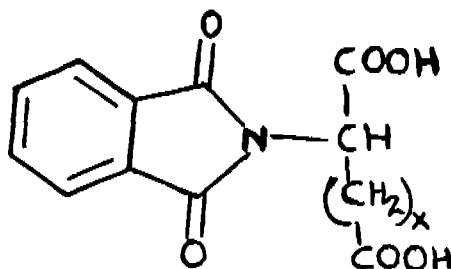


shown in Fig. 2 of the drawings accompanying the specification which comprises (1) fusing a dibasic amino acid of the Formula (A)



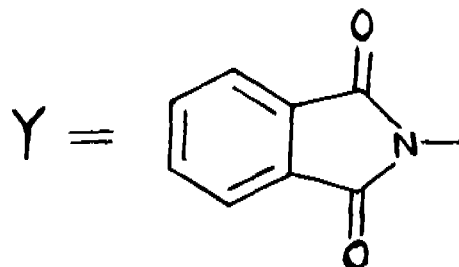
Wherein x is one or two, with phthalic anhydride (B) to give the N-Phthalyl derivative (I)

(II) refluxing the N-phthalyl derivative of the formula (I)



with acetic anhydride to give N-phthalyl amino acid anhydride (II) wherein x has the meaning given above.

(III) condensing the N-phthalyl amino acid anhydride (II) with sterol (C) such as herein described in the presence of aromatic hydrocarbon solvents such as herein described to give N-phthalyl T/β sterol amino acid ester (III) where x has the meaning given above and y represents a group of formula (D)



(IV) refluxing the N-phthalyl T/β sterol amino acid ester (III) with hydrazine hydrate in an alcoholic solvent solution to give T/β sterol amino acid ester (IV) where x is as defined above and R is ergosterol,

(V) treating the ester (IV) with phosgene in dry dioxane to give N-carboxyl anhydride of T/β sterol amino acid (V) where x and R are as defined above.

(VI) treating the acid (V) where x and R are as defined above with triethyl amine in dry dimethyl formamide at room temperature followed by acidification to yield L-poly T/β sterol amino acid ester of the Formula (VI) where x and R are as defined above and n is 20—30.

Compl. Specn. 22 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 166-B

167488

Int. Cl.⁴ : B63 J 5/00.

ARTICULATED COUPLING FOR BOATS IN A PUSHING UNIT.

Applicant and Inventor : JOEL VERNEAUX, A FRENCH CITIZEN OF 11, RUE GUSTAVE ZEDEL, 75016 PARIS, FRANCE.

Application for Patent No. 991/Del/86, filed on 11th November, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules 1972), Patent Office Branch, New Delhi-110005.

9 Claims

Articulated coupling for boat in a pushing unit, constituted by a pair of mechanical assemblies of the same structure disposed symmetrically on either side of the common longitudinal axis (41, 42) of the two boat (42) connected by the coupling when they are aligned, each assembly comprising a coupling bar (3) articulated by its ends respectively on the first and on the second boat, and extending parallel to said common longitudinal axis of the boat in alignment, at a distance from this axis,

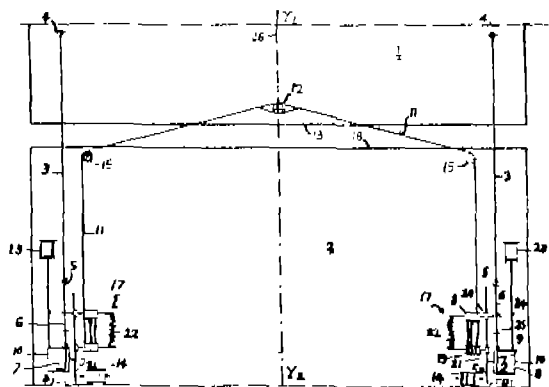
Characterized in that it further comprises :

—a bar support (6) mounted on the second boat (2) bearing the corresponding articulation of the coupling bar and sliding longitudinally over a stroke limited by a pair of stops (8, 9) connected to

the second boat, namely a first stop serving as bearing for the bar support to transmit via said bar the propelling effort from the pushing boat to the pushed boat, and a second stop serving as bearing for the bar support to retain said bar when it is subjected to an effort of traction from the first boat;

—a cable (11) fixed on the one hand to the first boat at a point (12) lying on the longitudinal axis (41) thereof, in the vicinity of its end contiguous to the second boat, and on the other hand to the second boat at a point remote from the longitudinal axis thereof, this cable passing over a guide pulley (15) fixed to the second boat near its end contiguous to the first boat, so that the cable, mechanically tensioned by means of an elastic device, extends substantially transversely between its point of anchorage to the first boat and said guide pulley and substantially longitudinally between the guide pulley and its point of fixation to the second boat;

—and means for coupling the cable to the bar support, by means of which the extension of the cable from the second boat, under the effect of forces of traction to which it is subjected from the first boat, is limited to a determined value function of the longitudinal position of the bar support.



Compl. Specn. 20 Pages.

Drgs. Sheet 7.

Ind. Cl. : 144 E2 [XII (3)]

167489.

Int. Cl.4 : C 08 L 7/00.

A PROCESS FOR THE PREPARATION OF A COMPOSITION FOR USE IN PROTECTIVE COATING OF SUBSTRATES.

Applicant(s) : STOCKHOLM TRADE COMPANY AKTIEBOLAG, A SWEDISH COMPANY, OF P.O. BOX 191, S-191 23 SOLLENTUNA, SWEDEN.

Inventors : EK ROLF LENNART, NYGREN S GUME BERTIL.

Application for the Patent No. 1013/Del/86 filed on the 20th November, 1986.

Appropriate Office for the Opposition Proceedings (Rule 4. Patent Rule 1972), Patent Office Branch, New Delhi-11005.

7 Claims

A process for the preparation of a composition for use in protective coating of substrates which comprises mixing rubber having a

particle size of at most 0.4 mm present in an amount of 20—50% by weight, and an isocyanate curable polymer base present in an amount of 40—55% by weight, a polymer curing isocyanate in an amount of 18—30% by weight, and an aliphatic polyether glycol in an amount of 1-5% by weight and curing said mixture by subjecting it to a vacuum pressure of at least 0.9 bar.

Compl. Specn. 9 Pages.

Drgs. nil.

Ind. Cl. : 140 A2.

167490

Int. Cl.4 : C 01 M 129/00.

A PROCESS FOR PREPARING AN OIL-SOLUBLE VISCOSITY IMPROVER.

Applicant : THE LUBRIZOL CORPORATION, OF 29400 LAKELAND BOULEVARD WICKLIFFE, OHIO 44092 U.S.A. A CORPORATION OF THE STATE OF OHIO, U.S.A.

Inventors : KATSUMI HAYASHI, THOMAS ROBERT HOPKINS, CURTIS RICHARD SCHARF.

Application for Patent No. 1026/Del/86, filed on 25th November, 1986.

Appropriate Office for Opposition Proceedings (Rule 4 Patent Rules 1972), Patent Office Branch, New Delhi-11005.

15 Claims

A process for preparing an oil-soluble viscosity improver comprising reacting :

(A) a hydrogenated block copolymer comprising a normal block copolymer or a random block copolymer, wherein said normal block copolymer is consisting of amono-vinyl substituted aromatic and an aliphatic conjugated diene and having from two to five polymer blocks with at least one polymer block of said mono-vinyl substituted aromatic and at least one polymer block of said aliphatic conjugated diene, and said random block copolymer is consisting of mono-vinyl substituted aromatic and aliphatic conjugated diene monomers, the total amount of said mono-vinyl substituted aromatic blocks in said block copolymer being in the range of from 20% to 70% by weight and the total amount of said diene blocks in said block copolymer being in the range of from 30% to 80% by weight; the number average molecular weight of said block copolymer being in the range of 100,000 to 500,000; with

(B) an alpha-beta olefinic unsaturated carboxylic reagent containing 2 to 20 carbon atoms exclusive of the carboxy groups in an amount of from 0.2 per cent to 20 per cent by weight based upon the total weight of said (A) block copolymer and said (B) unsaturated carboxylic reagent; in the presence of from 0.01 to 5 per cent by weight of (C) a free radical initiator, based upon the weight of said (A) block copolymer and said (B) unsaturated carboxylic reagent.

Compl. Specn. 63 Pages.

Drg 1 Sheet

Ind. Cl. : 32 F2 (b).

167491

Int. Cl. : C 07 D-209/82.

A PROCESS FOR THE SYNTHESIS OF NOVEL CIS 1, 2, 3, 4, 4a, 5, 6, 11 c-OCTAHYDRO-7H-PYRIDO (2, 3-c) CARBAZOLE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH RAJ MARG NEW DELHI-110001, INDIA, AN

INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

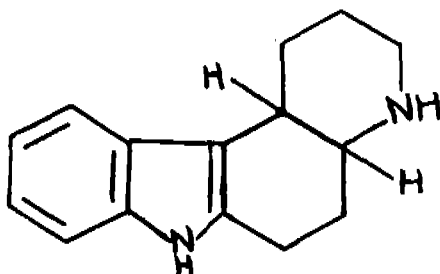
Inventors : ANIL KUMAR SAXENA & HEMANT KUMAR SINGH & BHOLA NATH DHAWAN & NITYA ANAND.

Application for Patent No. 1054/Del/86 filed on 3rd December, 1986.

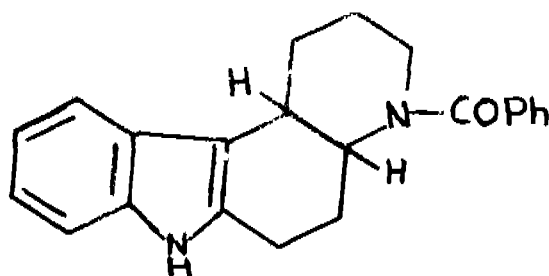
Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, New Delhi-110005.

12 Claims

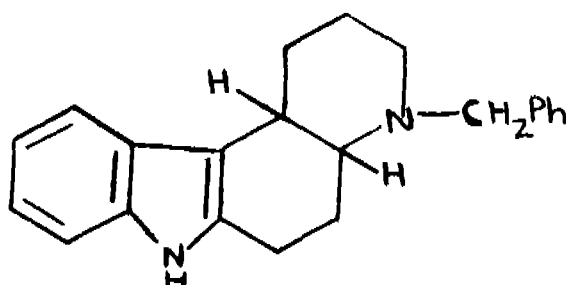
A process for the synthesis of novel cis 1, 2, 3, 4, 4a, 5, 6, 11 c-octahydro-7H-Pyrido (2, 3-c) carbazole of the Formula (3)



which comprises reducing by known method the cis-4-benzoyl-1,2,3,4,4a,5,6,11 c-octahydro-7H-Pyrido (2, 3-c) carbazole of the formula (1)



to give cis-4-benzyl-1,2,3,4,4a,5,6,11 c-octahydro (2, 3-c) carbazole of the formula (2)



debenzylating the compound of the formula (2) by methods to yield the cis 1, 2, 3, 4, 5, 6, 11 c-octahydro-7H-pyrido (2, 3, -c) carbazole.

Compl. Specn. 7 Pages.

Dr. 1 Sheet.

Ind. Cl. : 32 F2 (b).

167492

Int. Cl. : C 07 D-209/32.

A PROCESS FOR THE SYNTHESIS OF CIS-1-ALKYL SUBSTITUTED- 1, 2, 3, 4, 4a, 5, 11, 11 a-OCTAHYDRO-6H-PYRIDO (3, 2-b) CARBAZOLE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

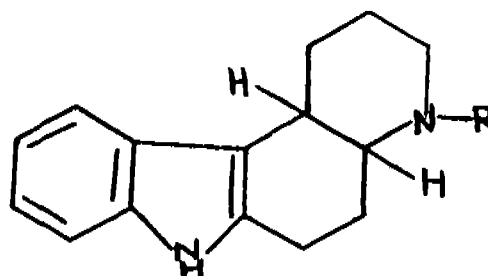
Inventors : ANIL KUMAR SAXENA & HEMANT KUMAR SINGH & BHOLA NATH DHAWAN & NITYA ANAND.

Application for Patent No. 1056/Del/86 filed on 3rd December, 1986.

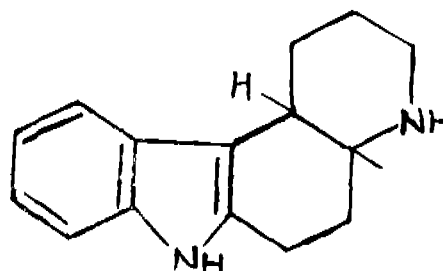
Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, New Delhi-110005.

7 Claims

A process for the preparation of cis-1-alkyl-substituted-1,2,3,4,4a,5,11,11 a-octahydro-6H-Pyrido (3, 2-b) carbazole of the formula (2)



Where R = alkyl such as methyl, ethyl, isopropyl which comprises alkylating Cis 1, 2, 3, 4, 4a, 5, 11, 11a-octahydro-6H-pyrido (3, 2-b) carbazole of the formula (1)



with appropriate alkyl halide in presence of sodium carbonate.

The product of the invention is useful in the treatment of Parkinsonism Syndromes and CNS disorders.

Compl. Specn. 4 Pages.

Drg. 1 Sheet.

Ind. Cl. : 32 F 2 (b).

167493

Int. Cl. : C 07 D-209/82.

A PROCESS FOR THE SYNTHESIS OF CIS-4-ALKYL-SUBSTITUTED 1, 2, 3, 4, 4a, 5, 6, 11 c-OCTAHYDRO-7H-PYRIDO (2, 3-c).

Applicant(s) : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

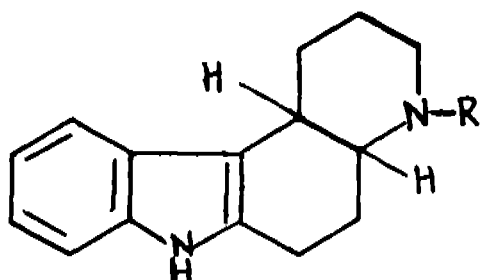
Inventor(s) : ANIL KUMAR SAXENA & HEMANT KUMAR SINGH & BHOLA NATH DHAWAN & NITYA ANAND.

Application for the Patent No. 1057/Del/1986, filed on 3rd December, 1986.

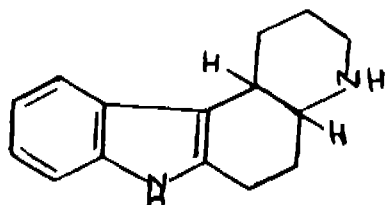
Appropriate Office for the Opposition Proceedings (Rule 4, Patent Rules 1972), Patent Office Branch, New Delhi-110005.

4 Claims

A process for the preparation of cis-4-Alkyl-substituted-1, 2, 3, 4a, 5, 6, 11, 11c-octahydro-7H-pyrido (2, 3-c) carbazole of the formula (2)



Where R = C_{H3} , C_{2H5} , C_3H_7 of the accompanying drawings which comprises alkylating directly Cis-1, 2, 3, 4, 4a, 5, 6, 11, 11 c-octahydro-7H-pyrido (2, 3-c) carbazole of the formula (1)



which an appropriate alkyl halide in presence of Na₂CO₃.

The product of the invention is useful in the treatment of parkinsonism syndromes and CNS disorders.

Compl. Specn. 4 Pages.

Drg. 1 Sheet.

Ind. Cl. : 32 F 2 (b).

167494

Int. Cl. : C 07 D-209/82.

A PROCESS FOR THE SYNTHESIS OF CIS-4-METHYL-1, 2, 3, 4, 4a, 5, 6, 11c-OCTAHYDRO-7H-PYRIDO (2, 3-c) CARBAZOLE.

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA.

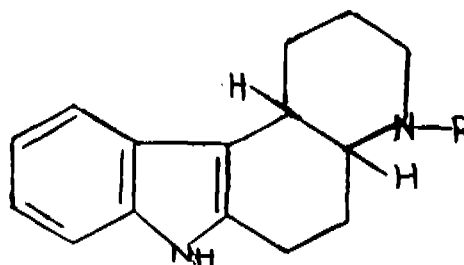
Inventor(s) : ANIL KUMAR SAXENA, HEMANT KUMAR SINGH, BHOLA NATH DHAWAN & NITYA ANAND.

Application for Patent No. 1058/Del/86, filed on 3rd December, 1986.

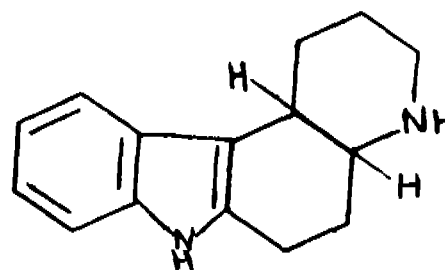
Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972), Patent Office Branch, New Delhi-110005.

8 Claims

A process for the preparation of Cis-4-methyl-1, 2, 3, 4, 4a, 5, 6, 11c-octahydro-7H-pyrido (2, 3-c) carbazole of the formula (2)



of the accompanying where R = CH_3 , which comprises formylating. Cis-1, 2, 3, 4, 4a, 5, 6, 11c-octahydro-7H-pyrido (2, 3-c) carbazole of



by heating with ethyl formate to give Cis-4-formyl-1, 2, 3, 4, 4a, 5, 6, 11 c-octahydro-7H-pyrido-(2, 3, c) carbazole of the formula (2) where R = CHO and reducing by known methods the intermediate formyl derivative.

The product of the invention is used as intermediate for the synthesis of potential dopaminergic agents.

Compl. Specn. 5 Pages.

Drg. 1 Sheet.

Ind. Cl.: 24 D2 LV.
Int. Cl.: B60T-11/06.

167495.

Int. Cl.: 32 E
Ind. Cl.: CO 8L 7/00, 23/06 & 23/12.

167496.

DAUL CIRCUIT BRAKE VALVE FOR HEAVY DUTY VEHICLE.

Applicant: ALLIED CORPORATION OF COLUMBIA ROAD AND PARK AVENUE MORRIS TOWNSHIP, MORRIS COUNTRY, NEW JERSEY UNITED STATES OF AMERICA, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK.

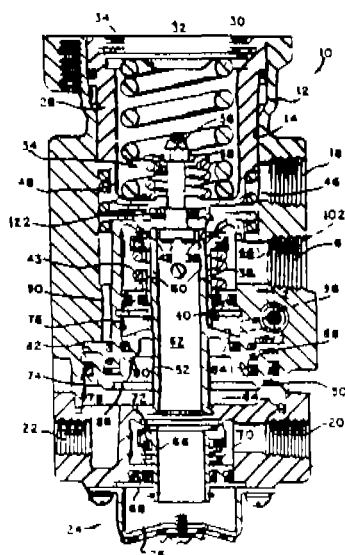
Inventor(s): ROY EDWIN BARTHOLOMEW & MILLAN JOHN SEBO.

Application for Patent No. 161/Del/87 filed on 24th February, 1987.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rule, 1972), Patent Office Branch, New Delhi-110005.

(5 Claims)

Dual circuits brake valve for heavy duty vehicle comprising a housing (12) having a pair of inlets, (16, 20) a pair of outlets (18, 22), and an exhaust (24), said housing (12) defining a bore (14) therewithin, a first set of cooperating valve members (36, 38, 42) in said bore (14) and for controlling communication between said exhaust (24), one of said inlets (16), and a corresponding one of said outlets (18), a second set of cooperating valve members (64, 66, 72) mounted in said bore (14) for controlling communication between said exhaust (24), the other inlet (20), and the other outlet (20), an operator-actuated plunger (28) slidable in said bore (14) for operating said first set of valve members (36, 38, 42), a relay piston (50) slidably mounted in said bore (14) for operating said second set of valve members (64, 66, 72) characterised in that said relay piston (50) has a primary piston portion (82) and a secondary piston portion (84), said primary piston portion (82) being in communication with said one outlet (18) by means of a passage (90) and control means (92) located between said one outlet (18) and said secondary piston portion (84) and being shiftable from a first position communicating said secondary piston portion (84) with said primary outlet (18) and a second position venting said secondary piston portion to atmosphere (84) regardless of the pressure level at said primary outlet (18).



Compl. Specn. 13 Pages.

Drg. 1 Sheet.

A METHOD OF PREPARING AN ELASTOPLASTIC COMPOSITION.

Applicant: THE MALAYSIAN RUBBER PRODUCERS RESERACH ASSOCIATION, A BRITISH BODY CORPORATE, OF TUN ABDUL RAZAK LABORATORY, BRICKENDONBURY, HERTFORD SG13 8NL, ENGLAND.

Inventors: IRAN RICHARD GELLING, ANDREW JOHN TINKER & CARL LEONARD RIDDIFORD.

Application for the Patent No. 230/Del/87 filed on 18th February, 1987.

Convention date March 19th 1986/8606808/U.K.

Appropriate Office for Opposition Proceedings (Rules 4, Patent Act, 1972), Patent Office Branch, New Delhi-110005.

(6 Claims)

A method of preparing an elastoplastic composition for the manufacture of shaped articles or the like comprising a blend of a thermoplastic (1) polyolefin resin of the kind such as herein described and vulcanized (2) epoxidized natural rubber of the kind such as herein described which method comprises mixing the thermoplastic polyolefin resin and the epoxidized natural rubber at a temperature sufficient to soften or melt the resin so as to form an intimate blend of resin and epoxidized natural rubber, then while continuing the mixing, adding curative (3) of the kind such as herein described for the rubber in an amount sufficient to achieve essentially complete gelation of the epoxidized natural rubber, and continuing the mixing at a vulcanization temperature until vulcanization of the epoxidized natural rubber is complete.

Compl. Specn. 20 Sheets.

DRAWING—NIL.

Ind. Cl.: 32 E
Int. Cl.: CO8L 23/00

167497.

POLYOLEFIN COMPOSITIONS.

Applicant: SOCIETE CHIMIQUE DES CHARBONNAGES, A LIMITED COPANY OF FRANCE, OF TOUR AURORE, PLACE DES REFLETS, O F-92080 PARIS LA DEFENSE-CEDEX 5, (FRANCE).

Inventor: VINCENT CRENA.

Application for the Patent No. 241/Del/87 filed on 20th March, 1987.

Appropriate Office for Opposition Proceedings (Rules 4, Patent Act, 1972), Patent Office Branch, New Delhi-110005.

(5 Claims)

A polyolefin composition comprising as a first component (A) at least one highly isotactic propylene polyene such as herein described and, as a second component (B), at least one linear copolymer such as herein described with a density of between 0.914 and 0.945, of ethylene and of at least one olefin containing from 3 to 12 carbon atoms and at least one terpolymer (C) said composition per 100 parts by weight,

comprises from 30 to 40 parts by weight of polymer (A), from 40 to 67 parts by weight of polymer (B) and from 3 to 25 parts by weight of (C) with a density of between 0.865 and 0.912, comprising from 70 to 94 mole % of ethylene, from 4 to 20 mole % of propylene and from 2 to 10 mole % of at least one—olefin containing from 4 to 12 carbon atoms.

Compl. Specn. 10 Pages.

DRAWING—NIL.

Ind. Cl. : 32 C IX (1).

167498.

Ind. Cl.⁴ : A 61 K 35/00.

A PROCESS FOR THE ISOLATION OF NOVEL ANTI-DIABESTIC IONOSITOL MONOMETHYLETEEN FROM BOUCAINVILLAEA SPECTABILIS.

Applicant(s) : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-10001, INDIAN, ON INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860)

Inventor(s) : SHEELA PRASAD NAIR, JANASWANY MADHUSUDANA RAO.

Application for Patent No. 857/Del/87 filed on 20th September, 1987.

Appropriate Office for Opposition Proceedings (Rules 4, Patent Act, 1972), Patent Office Branch, New Delhi-110005.

(7 Claims)

A process for the isolation of novel antidiabetic irositol mono methyl ether from the leaves of bougainvillaea spectabilis which comprises extracting the dry powdered leaves with a solvent such as herein described, refluxing the resultant extract with an organic solvent such as herein described, distilling off the said solvent and isolating and purifying the active crude component by recrystallization using methanol.

Compl. Specn. 5 Pages.

DRAWING—NIL.

Ind. Cl. : 1 E XIII (1).

167499

Int. Cl.⁴ : C 08 B 31/00.

A METHOD FOR PRODUCING DESTRUCTURIZED STARCH.

Applicant : WARNER-LAMBERT COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE UNITED STATES OF AMERICA, OF 201 TABOR ROAD, MORRIS PLAINS, NEW JERSEY-07950, UNITED STATES OF AMERICA.

Inventors : ROBERT FREDERICK THOMAS STEPTO IVAN TOMKA & BEAT DOBLER.

Application for the Patent No. 1038/Del/87, filed on 3rd December, 1987. Convention date March 9, 1987/8705442/U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-5.

11 Claims

A method for producing destructure starch, comprising heating a chemically non-modified starch material such as herein defined

having a water content in the range of 10 to 25% by weight of the total weight of the composition, in the presence of a chain scission catalyst of the kind such as herein described in a closed volume at a temperature in the range of 100°C to 200°C to form a thermoplastic melt and continuing heating until the mass average molar mass of said starch material is reduced by a factor of 2 to 5000, compared with its original mass average molar mass.

Compl. Specn. 21 Pages.

Drg. nil.

Ind. Cl. : 32 F2 (b) IX (1).

167500

Int. Cl.⁴ : C 07 D 251/54.

A PROCESS FOR THE PREPARATION OF 2-AMINO-4-ALKYL-6-ALKOXY-S-TRIAZINES.

Applicant(s) : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

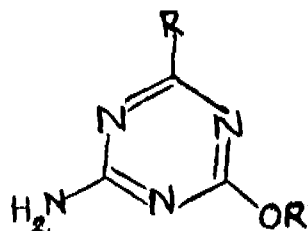
Inventor(s) : ATTALURI SIVAPRASAD, REVANNURU VENKATACHALIAH VENKATARATNAM, MAKINENI PANDURANGA RAO, KUPPUSAMY RADHAKRISHNAN & UDAY TRIAMBAK BHALLERAO.

Application for the Patent No. 1161/Del/87, filed on 31st December, 1987.

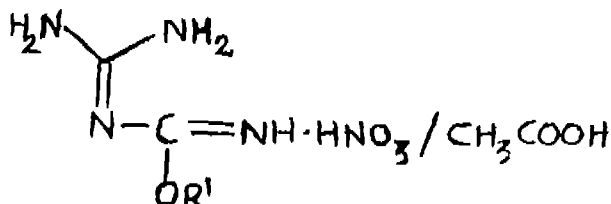
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

7 Claims

A process for the preparation of 2-amino-4 alkyl-6-alkoxy-s-triazines of the formula I



of the accompanying drawing where R and R' may be the same or different and represent alkyl groups like CH₃, C₂, H₃, n-C₄H₉, n-C₆H₁₃, iso-C₄H₉, which comprises cyclising in a manner as here in described a salt of guanyl-o-alkyl isourea of the formula VII



where R₁ has the meaning given above in the presence of a lower aliphatic acid anhydride such as herein described maintaining the

cyclised product at room temperature for a period of 16 to 24 hrs. and recovering the final product by filtration.

Compl. Specn. 9 Pages.

Drg. 1 Sheet.

Ind. Cl. : 188.

167501

Int. Cl. : C23 C 4/06.

A COATING COMPOSITION.

Applicant : UNION CARBIDE CORPORATION, MANUFACTURERS, ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA; WITH OFFICES AT : OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT, 06817, UNITED STATES OF AMERICA.

Inventor(s) : CALVIN HENRY LONDREY & THOMAS ALLEN ADLER.

Application for the Patent No. 833/Del/84 filed on 27th October, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

2 Claims

A powdered coating composition for applying a high strength, wear and corrosion resistant coating onto a substrate by a thermal spray process consisting essentially of from 8.0 to 11.0 weight percent cobalt from 8.0 to 11.0 weight percent chromium, from 4.0 to 5.5 weight percent carbon and the balance tungsten.

Compl. Specn. 23 Pages.

Drg. nil.

Ind. Cl. : 188

167502

Int. Cl. : C 23C 4/06.

AN UNSINTERED POWDERED COATING COMPOSITION FOR APPLYING A HIGH STRENGTH, WEAR AND CORROSION RESISTANT COATING ONTO A SUBSTRATE.

Applicant : UNION CARBIDE CORPORATION, MANUFACTURERS, ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA; WITH OFFICE AT : OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT, 06817, UNITED STATES OF AMERICA.

Inventor(s) : JOHN ERIC JACKSON, THOMAS ALLEN ADLER, JEAN MARIE QUETS & ROBERT CLARK TUCKER, JR.

Application for the Patent No. 834/Del/84 filed on 27th October, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

3 Claims

An unsintered powdered coating composition for applying a high strength, wear and corrosion resistant coating onto a substrate such as herein described by a thermal spray process consisting essentially of

from 11.0 to 18 weight percent cobalt, from 1.5 to 6 weight percent chromium from 3 to 5.5 weight percent carbon and the balance tungsten.

Compl. Specn. 26 Pages.

Drg. nil.

Ind. Cl. : 188

167503

Int. Cl. : C 23C 4/06.

AN UNSINTERED POWDERED COATING COMPOSITION FOR APPLYING A WEAR AND CORROSION RESISTANT COATING TO A SUBSTRATE.

Applicant : UNION CARBIDE CORPORATION, MANUFACTURERS, ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA; WITH OFFICES AT : OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT, 06817, UNITED STATES OF AMERICA.

Inventor(s) : JOHN ERIC JACKSON, THOMAS ALLEN ADLER, JEAN MARIE QUETS.

Application for the Patent No. 835/Del/84 filed on 27th October, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

2 Claims

An unsintered powdered coating composition for applying a wear and corrosion resistant coating to substrate such as herein described by a thermal spray process consisting essentially of from 6.5 to 9.0 weight percent cobalt, from 2.0 to 4.0 weight percent chromium, from 3.0 to 4.0 weight percent carbon and the balance tungsten.

Compl. Specn. 16 Pages.

Drg. nil.

Ind. Cl. : 202 C [XI(3)].

167504

Int. Cl. : C 11 B 13/00.

A METHOD FOR RECOVERING DEWAXING AID FROM A MIXTURE OF PRECIPITATED WAX-DEWAXING AID.

Applicant : EXXON RESEARCH AND ENGINEERING COMPANY, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, CARRYING ON BUSINESS AS A COMPANY FOR THE HOLDING OF PATENTS AND GRANTING LICENCES THEREUNDER, AND TECHNICAL DEVELOPMENT AND RESEARCH WORK AT 180 PARK AVENUE, FLORHAM PARK, NEW JERSEY, UNITED STATES OF AMERICA.

Inventor : BIDDANDA UMESH ACHIA.

Application for Patent No. 911/Del/84 filed on 30th November, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-5.

12 Claims

A method for recovering dewaxing aid in an undergraded form from a mixture of precipitated wax-dewaxing aid produced by

chilling waxy hydrocarbon oil in the presence of dewaxing aid to yield precipitated wax-dewaxing aid mixture which is then separated from said chilled oil, the dewaxing aid recovery method comprising heating the separated, precipitated wax-dewaxing aid mixture to liquefy said mixture and selectively permeating said liquefied wax through a semi-permeable membrane under pressure yielding a liquefied wax permeate and an undergraded dewaxing aid retentate wherein the heating is to a temperature sufficient to liquefy the wax-dewaxing aid mixture, the semi-permeable membrane has an average pore size ranging from 500 to 2,000 Å and the dewaxing aid has a molecular weight ranging from 1,000 to 1,000,000.

Compl. Specn. 37 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 202 C [XI (3)].

167505

Int. Cl. : C 11 B-11/00, 13/00.

A METHOD FOR SEPARATION OF DEWAXING AIDS FROM WAX.

Applicant : EXXON RESEARCH AND ENGINEERING COMPANY, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, CARRYING ON BUSINESS AS A COMPANY FOR THE HOLDING OF PATENTS AND GRANTING LICENSES THEREUNDER, AND TECHNICAL DEVELOPMENT AND RESEARCH WORK AT 180 PARK AVENUE, FLORHAM PARK, NEW JERSEY UNITED STATES OF AMERICA.

Inventor : JOHN ARTHUR THOMPSON.

Application for Patent No. 912/Del/84 filed on 30th November, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-5.

10 Claims

A method for separating dewaxing aid from wax by contacting a selectively permeable membrane in spiral wound element form with a hot mixture of wax and dewaxing aid at a temperature of between about 70-150°C and at a feed flow velocity through the element of about 1-4 cm/sec., and thereby selectively permeating said wax through the spiral wound membrane element yielding a permeate rich in wax and a retentate rich in dewaxing aid, wherein the membrane is selected from the group consisting of polysulfone, nylon and cellulose acetate and spiral wound membrane element employs feed and retentate spacers made of polyester of small diameter inert rods in its construction.

Compl. Specn. 24 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 72 C.

167506

Int. Cl.⁴ : C06B 33/02.

"A GAS BUBBLE SENSITIZED WATER-IN-OIL EMULSION EXPLOSIVE COMPOSITION AND A PROCESS FOR PREPARING THE SAME."

Applicant : ICI AUSTRALIA LIMITED, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF VICTORIA, OF 1 NICHOLSON STREET, MELBOURNE, VICTORIA, 3000, AUSTRALIA.

Inventors : DAVID JOHN CURTIN & DAVID EDWIN YATES.

Application for Patent No. 298/Del/85 filed on 9th April, 1985.

Convention date 19th April, 1984/PG 4650/(AUSTRALIA).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

13 Claims

A gas bubble sensitized water-in-oil emulsion explosive composition comprising a discontinuous aqueous phase comprising 45 to 95% by wt. of at least one oxygen-releasing (1) salt such as herein described 2 to 15% by wt. of a continuous water-immiscible (2) organic phase such as herein described a discontinuous (3) gaseous phase such as herein described and having a density range of from 7 to 1.4g/cm³ 01 to 2.0% by wt. of a water-in-oil emulsifying agent such as herein described and at least one agent as herein described which is capable of facilitating the production of gas bubbles in the presence of said water immiscible organic phase.

Compl. Specn. 28 Pages.

Ind. Cl. : 163D [XLIV (3)], 61 H, I (VIII).

167507

Int. Cl. : F16D 3/00; D21 D 7/02.

A ROTARY COUPLING FOR DIRECT ENGAGEMENT ON ONE HAND WITH THE END FACE OF THE JOURNAL OF A ROTARY HEAT EXCHANGING DRUM AND ON THE OTHER HAND WITH A FLUID SUPPLY OR EXHAUST AND DRAINAGE SYSTEM.

Applicant : THE JOHNSON CORPORATION, A CORPORATION OF MICHIGAN, U.S.A., OF 805 WOOD STREET THREE RIVERS, MICHIGAN 49093, U.S.A.

Inventor : ELDON DOUGLAS JACKSON.

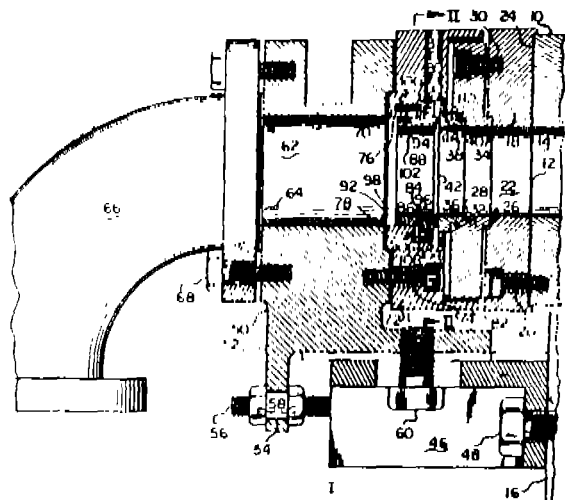
Application for Patent No. 1086/Del/85 filed on 19th December, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

10 Claims

A rotary coupling for direct engagement on one hand, with the end face (12) of the journal (10) of a rotary heat exchanging drum wherein the journal is of a cylindrical configuration having a concentric bore (14) and a flat end face (12) substantially perpendicular to the journal axis and on the other hand within a fluid supply or exhaust and drainage system, said rotary coupling comprising in combination, an annular flange (18) concentrically mountable upon the journal (10) end face for rotation therewith, an annular adapter (28) concentrically mounted upon said flange (18) for rotation therewith, said adapter having a bore concentric with the journal bore, characterised by a first annular seal (38) mounted on said adapter (28) concentric to said adapter bore having a radial sealing face (42), a body (50) having an internal chamber and a port in communication with said chamber, a bracket (46) supporting said body in fixed relation to the drum journal (10), an annular seal (84) plate (72) mounted upon said body in opposed axial alignment with said adapter, a cylindrical bore defined in said seal plate coaxial with said adapter bore, a second annular seal (84) sealingly mounted within said seal plate bore (76) relatively axially movable therein, an annular seal surface defined on said second seal engaging said first seal face, first and second radially disposed opposed differential pressure surfaces defined on said

second seal exposed to the fluid pressure within said body chamber imposing opposed axial forces on said second seal, fluid pressure on said first surface forcing said second seal toward said first seal and fluid pressure on said second surface forcing said second seal away from said first seal, the area of said first surface being greater than the area of said second surface, and conduit means affixed to said body in communication with said port.



Compl. specn. 15 pages

Drgs 1 sheet.

Int. Cl⁴: F28D 7/00, F28F, 5/02, 5/00, F16L, 37/00.

167508

"A ROTARY JOINT FOR USE WITH A ROTARY HEAT EXCHANGER DRUM".

Applicant: THE JOHNSON CORPORATION, A CORPORATION OF MICHIGAN, U.S.A. OF 805 WOOD STREET, THREE RIVERS, MICHIGAN 49093, U.S.A.

Inventor: ELDON DOUGLAS JACKSON.

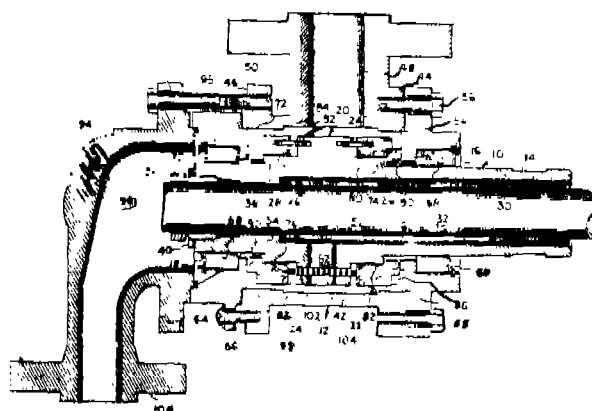
Application for Patent No. 1088/Del/85 filed on 19th December, 1985.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rule, 1972), Patent Office Branch, New Delhi-110005.

(7 Claims)

A rotary joint for use with a rotary heat exchanger drum particularly suitable for use with a high pressure fluid medium comprising, in combination, an elongated tubular one-piece nipple adapted to be coaxially attached to a drum shaft for rotation therewith about the drum axis of rotation, said nipple including in inner cylindrical and region, and outer cylindrical and region and a central region, said central region being of a greater diameter than the diameter of said end regions and including a central radial flange having opposed, axially spaced radial sides, a cylindrical surface defined upon said central region adjacent each flange side of a diameter greater than that of said nipple and regions, a body having first and second ends and a chamber located therein intersecting said ends, an inlet defined in said body in communication with said chamber, said nipple central region being located within said chamber and said inner end region being exteriorly located with respect to said body, an annular wear plate mounted upon said body first end, an annular assembly plate mounted upon said body second end, said nipple inner end region extending through said wear plate, said nipple outer end region extending into said assembly plate, inner radial seal faces defined upon said plates within said chamber, axially spaced annular bushings interposed between said wear plate and nipple inner end region and said assembly plate and nipple outer end region, respectively, first and second annular seals sealingly mounted upon said nipple central region for axial displacement thereon and axially spaced from each other, one of said seals being mounted upon each

cylindrical surface defined adjacent each flange side whereby said seals are located upon opposite sides of said flange, said first seal sealingly engaging said wear plate seal face and said second seal sealingly engaging said assembly plate seal plate, each of said seals having a radial first pressure face and a radial second pressure face in opposed relation and exposed to the fluid pressure within said chamber, the area of said first pressure faces being slightly larger than the area of said second pressure faces whereby the fluid pressure of said first pressure faces forces said seals towards their associated plate seal face, and an orifice defined in said nipple central region establishing communication between said chamber and the interior of said nipple.



Compl. Specn. 14 Pages.

Drg. 1 Sheet.

Ind. Cl. : 32 F_{2(a)}

167509

Int. Cl⁴: C 07 C-85/04.

'PROCESS FOR THE PRODUCTION OF 4-NITRO-DIPHENYLAMINES'.

Applicant(s): BAYER AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY OF LEVERKUSEN, BAYERWERK, FEDERAL REPUBLIC OF GERMANY.

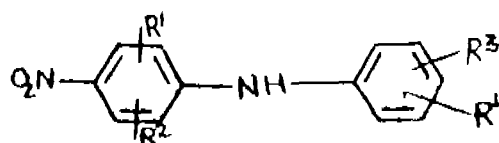
Inventor(s): CHIRARANJAN PODDER & HASSO SCHLESSELMANN.

Application for Patent No. 344/Del/86 filed on 17th April, 1986

Appropriate Office for Opposition Proceedings (Rules 4 Patents Rule, 1972), Patent Office Branch, New Delhi-110005.

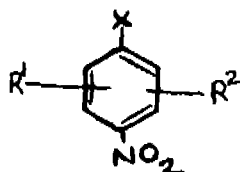
(3 Claims)

A process for the production of 4-nitrodiphenylamines corresponding to the general formula I

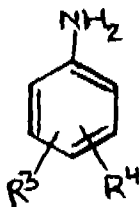


of the accompanying drawings wherein R¹, R², R³ and R⁴, which may be the same or different, represent hydrogen or an alkyl radical containing from 1 to 9 carbon atoms; by reaction of halo nitrobenzene

corresponding to the general formula II



of the accompanying drawings wherein x represents chlorine or bromine and R¹ and R² are as defined above; with primary aromatic amines corresponding to the general formula III



of the accompanying drawing wherein R³ and R⁴ are as defined above; in the presence of potassium carbonate and copper compounds as herein described characterised in that (1) 0.01 to 0.1 mol of mono- or di-carboxylic acid amides or nitriles of the kind as herein described are added (2) 1 to 6 mol of said primary amine are added per mol of halo nitrobenzene and (3) 1-2 to 2 mol of the primary amine are added before the beginning of the reaction and the remainder during the reaction at such a rate that the molar excess of primary amine relative to halo nitrobenzene is always from 100 to 400%

Compl. Specn. 11 Pages.

Drq. 1 Sheet.

Ind. Cl.: 32 E [(IX) (1)]
Int. Cl.: C 08. F. 110/00

167510

A PROCESS FOR THE POLYMERISATION OF ALPHA OLEFINS USING A ZIEGLER-NATTA CATALYST AND TWO ORGANOMETALLIC COMPOUNDS.

Applicant: BP CHEMICALS LIMITED, A BRITISH COMPANY, OF BELGRAVE HOUSE, & BUCKINGHAM PALACE ROAD, LONDON SW1N 0SU, ENGLAND.

Inventors: JOELLE COLLOMB, DANIEL CLAUDE DURAND, LASZLO HAVAS, & FREDERIC ROBERTMARIE MICHEL MORTEROL.

Application for the Patent No. 688/Del/86, filed on 29th July, 1986.
Convention Date January 23rd, 1986/8601611/U.K.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-5.

10 Claims

A process for the polymerisation of alpha-olefins comprising (A) a prepolymerisation step by contacting one or more alpha-olefins with

a catalyst system of the Ziegler-Natta type consisting on the one hand of a catalyst comprising basically atoms of halogen, magnesium and a transition metal belonging to Groups IV, V or VI of the Periodic Table of Elements, and on the other hand of a cocatalyst based on one or more organometallic compounds of a metal belonging to Groups II or III of this Table, to produce a prepolymer and (B) a polymerisation step comprising contacting said prepolymer under gas phase polymerisation conditions with one or more alpha-olefins in the presence of an organometallic cocatalyst, the process being characterised in that;

(1) the cocatalyst employed in step (A) is at least one low volatility organometallic compound (a) having a vapour pressure at 80°C of less than 65 Pa, in a quantity such that the atomic ratio of the quantity of metal in the organometallic compound (a) to the quantity of transition metal in the catalyst is at least 0.5 and at most 2.5, and

(2) the cocatalyst employed in step (B) is at least one volatile organometallic compound (b), having a vapour pressure at 80°C equal to or greater than 65 Pa in a quantity such that the compound (b) to the quantity of transition metal in the prepolymer-based catalyst is at least 0.5, and that the atomic ratio of the total quantity of metal in the organometallic compound (a) and (b) to the quantity of transition metal in the catalyst is at least 2.5 and at most 9, the organometallic compound (b) being introduced into the polymerisation medium separately from the prepolymer.

Compl. specn. 27 pages.

Drq. Nil

Ind. Cl.: 32 E IX (1)
Int. Cl.: C 07. C. 65/14, 27/10, 51/00.

167511

A PROCESS FOR PRODUCING DEMETHYL TEREPHTHALATE.

Applicant(s): SIR PADAMPAT RESEARCH CENTRE (A DIVISION OF J.K. SYNTHETICS LTD.) OF JAYKYNAGAR, KOTA-324003, RAJASTHAN, INDIA.

Inventor(s): ASHOK AMURAT VAIDYA, KRISHNAPAT-RUNI VARAHA NARRASIMHAM, PURSHOTTAM SHARMA.

Application for the Patent No. 5/Del/87, filed on 2nd January, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-110005.

7 Claims

A process for producing dimethyl terephthalate from the waste generated in the preparation of cationic driable polyethylene terephthalate which comprises in subjecting the waste to the step of glycolysis in a manner as herein described at a temperature of 180 to 220°C, cooling the reaction mixture and then subjecting the reaction mixture to the step of methanolysis in a manner as herein described at a temperature of 50 to 100°C, cooling the reaction mixture to obtain dimethyl terephthalate which is then subjected to any known method of purification.

Compl. specn. 11 pages.

Drq. Nil

Ind. Cl. : 194 B (LXIII) (4), 206 E (LXII) 126 D (LVIII) (6) 167512
Int. Cl.⁴ : H 03. B. 5/32

DOUBLY OSCILLATING QUARTZ CRYSTAL MONITOR (DQM).

Applicant & Inventor : DR. DEVENDRA KUMAR KAUSHIK, DR. SANTOSH KUMAR CHATTOPADHYAYA, DR. NARENDRA NATH.

DR. DEVENDRA KUMAR KAUSHIK, LECTURER, DAYANAND COLLEGE, HISAR-125001, DR. SANTOSH KUMAR CHATTOPADHYAYA, READER AND DR. NARENDRA NATH, PROFESSOR, PHYSICS DEPARTMENT, KURUKSHETRA UNIVERSITY, KURUKSHETRA-132119, INDIA, ALL CITIZENS OF THE REPUBLIC OF INDIA.

Application for the Patent No. 11/Del/87, filed on 6th January, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-110005.

1 Claim

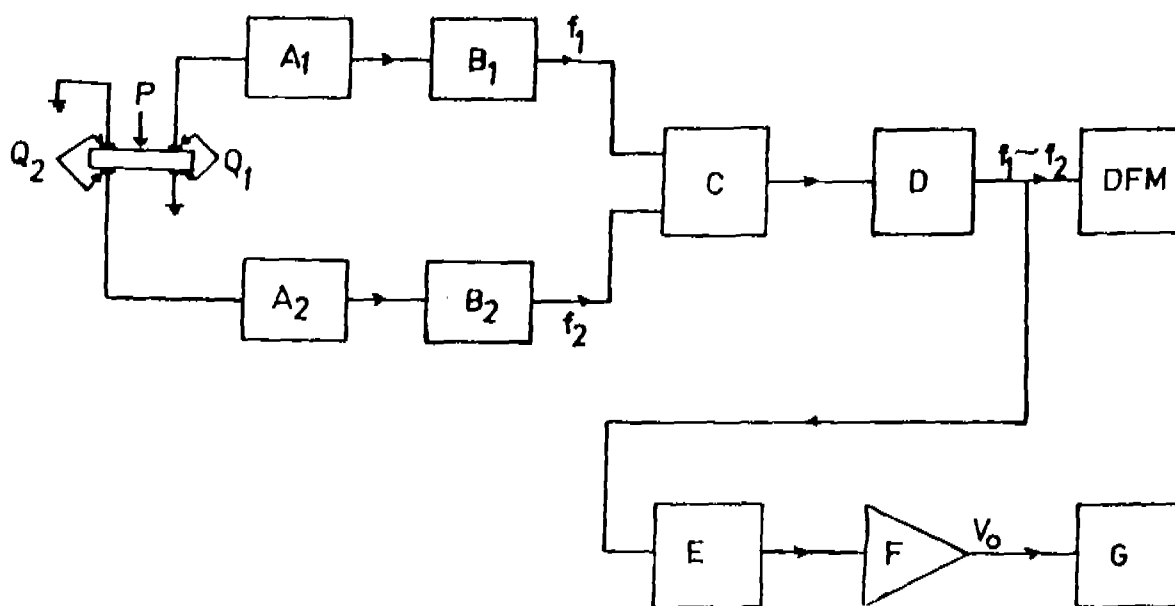
A doubly oscillating quartz crystal monitor (DQM) for measuring the thickness and rate of growth of thin films during deposition by vacuum evaporation comprising :

an AT-cut quartz crystal 1 (P) of 5 MHz resonance frequency with two pairs of gold electrode Q₁ Q₂ deposited on it, one electrode pair is exposed for mass deposition of thin films and the other electrode pair is kept covered and is not exposed for mass deposition,

two oscillator circuits A₁ A₂ coupled to electrode pairs for exciting the two electrode pairs of the quartz crystal to their resonance frequencies, the output of which are connected to two amplifier circuits; the outputs of the said amplifier circuits are connected to a mixer circuit, which generates the beat frequency of the two oscillator frequencies,

a digital frequency meter (DFM) connected to the output of mixer circuit for measuring the beat frequency which gives the thickness of the film deposited,

a frequency-to-voltage converter (E) connected also to the output of mixer circuit to convert the beat frequency into its equivalent d.c. signal, whose output is connected to the unity gain d.c. amplifier, a x-y recorder for recording the output of unity gain d.c. amplifier which gives the record of the rate of growth of thin films.



Compl. specn. 10 pages.

Drq. 5 sheets

Ind. Cl. : 194 B LXIII (4) & 206 LXII
Int. Cl.⁴ : H 03. B. 5/32

167513

Application for the Patent No. 12/Del/87, filed on 6th January, 1987.

SINGLE OSCILLATION THIN FILM THICKNESS MONITOR.

Applicant & Inventors : DR. DEVENDRA KUMAR KAUSHIK, LECTURER, DAYANAND COLLEGE, HISAR-125001, DR. SANTOSH KUMAR CHATTOPADHYAYA, READER AND DR. NARENDRA NATH, PROFESSOR, PHYSICS DEPARTMENT, KURUKSHETRA UNIVERSITY, KURUKSHETRA 132 119, ALL CITIZENS OF THE REPUBLIC OF INDIA.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-5.

1 Claim

A single oscillation thin film thickness monitor for measuring the thickness and rate of growth of thin films during deposition by vacuum evaporation comprising;

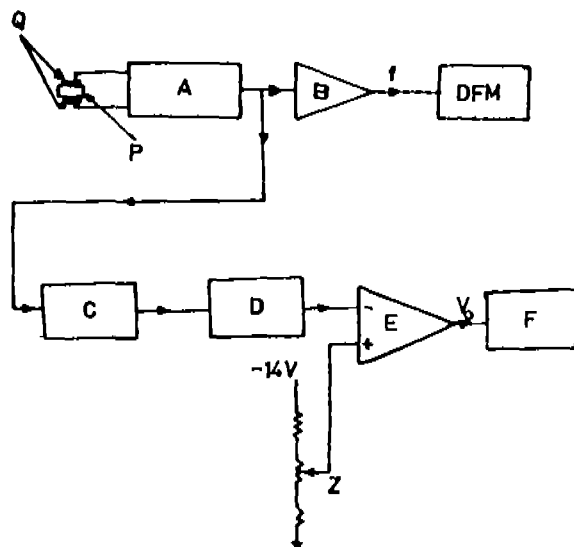
an AT-cut quartz crystal (P) of 8.5 MHz resonance frequency with one pair of gold electrode (Q) deposited on it, the film whose thickness is to be measured is deposited on side of the electrode pair,

an oscillator circuit (A) coupled to pair of electrodes of the quartz crystal so as to excite to its resonance frequency which is then measured by a digital frequency meter,

a divider circuit (C) connected to the output of the oscillator to reduce the frequency by a factor of ten,

a frequency-to-voltage converter, (D) connected to the output of divider circuit to convert divider output frequency signal to equivalent d.c. signal,

a d.c. amplifier (E) connected to the output of frequency to voltage converter which amplifies the output of frequency-to-voltage converter having a zero dial adjustment and a x-y recorder connected to the output of the d.c. amplifier to record the rate of growth of thin films.



Compl. specn. 9 pages.

Drg. 5 sheets

Ind. Cl. : 18 XXXVII (1)
Int. Cl.⁴ : C 10, C. 1/20

167514

PROCESS FOR THE RECOVERY OF 2-MERCAPTOBENZOTHI-AZOLE, FROM TAR LIKE RESIDUES.

Applicants: BAYER ANTWERPEN N.V., A BODY CORPORATE ORGANISED UNDER THE LAWS OF BELGIUM, OF ANTWERPEN, BELGIUM, MANUFACTURERS.

Inventors: DENEKER GABRIEL, LAHOUSSE GUIDO, VAN-DEBROEK HENRI & BAMELIS POL.

Application for the Patent No. 19/Del/87, filed on 9th January, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-5.

4 Claims

Process for the recovery of 2-mercaptobenzothiazole from tar-like residues containing 2-mercaptobenzothiazole, aniline and benzothiazole, obtained after the preparation of 2-mercaptobenzothiazole, characterised in that the residue is heated at a temperature between 200 to 310°C for at least one hour to form a product mixture and removing in the manner herein described aniline and benzothiazole from the product mixture to recover said 2-mercaptobenzothiazole.

Compl. specn. 8 pages.

Drg. Nil

Ind. Cl. : 48 A 4 LVIII (3)

167515

Int. Cl.⁴ : H 01, B. 11/22

AN OPTICAL FIBRE ELEMENT.

Applicant(s): BICC PUBLIC LIMITED COMPANY, A BRITISH COMPANY, OF DEVONSHIRE HOUSE, MAYFAIR PLACE, LONDON W1 X 5 FH, ENGLAND.

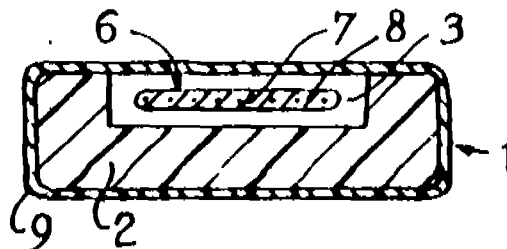
Inventor(s): MALCOM DONALD BARNETT, STEPHEN PETER DRISKEL, JOHN EDWARD TAYLOR.

Application for the Patent No. 172/Del/87, filed on 26th February, 1987. Convention Date February 28/86/8605016/U.K.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-5.

26 Claims

An optical fibre element (1) comprising a flexible elongate member having therein at least one elongate compartment (3) said compartment being partially surrounded by said elongate member (2) throughout its length; at least one optical fibre (7) loosely housed in the elongate compartment or in at least one of the elongate compartments; and means (9) integral with the elongate member for retaining the or each optical fibre within the elongate compartment or compartments, which elongate member is resiliently set with the central longitudinal axis thereof lying along a longitudinally extending path which, between any two longitudinally spaced positions, is greater in length than the rectilinear distance between said two positions whereby when a tensile force is applied to the undulating elongate member, the elongate straightens in a lengthwise direction against the action of its resilient set, thereby reducing the tensile force applied to the or each optical fibre and, when the tensile force is removed, the elongate member returns under the action of its resilience towards its original resilient set.



Compl. specn. 30 pages.

Drg. 3 sheets

Ind. Cl.: 146 C XXXVIII (2)
Int. Cl.: H 01. L. 31/00

167516

'A METHOD OF MANUFACTURING A PHOTOVOLTAIC DEVICE'

Applicant(s): THE STANDANRD OIL COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF OHIO, UNITED STATES OF AMERICA, HAVING A PLACE OF BUSINESS AT PATENT & LICENSE DIVISION, 200 PUBLIC SQUARE, CLEVELAND, OHIO 44114-2375, UNITED STATES OF AMERICA.

Inventor: MIROSLAV ONDRIS, MARTY ANTON PICHLER, RICHARD EDWARD BROWNFIELD.

Application for the Patent No. 274/Del/87, filed on 31st March, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-5.

9 Claims

A method of manufacturing a photovoltaic device comprising:

(a) electrodeposition steps consisting of:

preparing an acidic, aqueous electrolyte containing ions of a metal selected from Group IIB of the Periodic Table of Elements (as published by the American Chemical Society);

additions of a metal selected from Group IB of the periodic Table of Elements to said electrolyte in a concentration not exceeding about 24 parts per billion;

immersing a cathode comprising glass bearing a transparent electrically conducting film overlaid by a film of cadmium sulfide, and a tellurium anode in said electrolyte; and

applying a potential between said cathode and anode to deposit said cathode a semiconductor film comprising tellurium and said Group IIB metal doped with said Group IB metal;

(b) heat treating said semiconductor film to change its conductivity from n-type to p-type; and

(c) adding an electrical contact to at least said semiconductor film.

Compl. specn. 14 pages.

Drg. 1 sheet

Ind. Cl.: 131 B
Int. Cl.: G 01 N 7/00

167517

LITHOTRIPTOR FOR FRAGMENTATION OF STONES AND ASCERTAINING THE DEGREE OF SUCH FRAGMENTATION.

Applicant: JACQUES DORY, OF 91, RUE DES MOLVEAUX, 77450 COUPVRAY, FRANCE, A FRENCH CITIZEN.

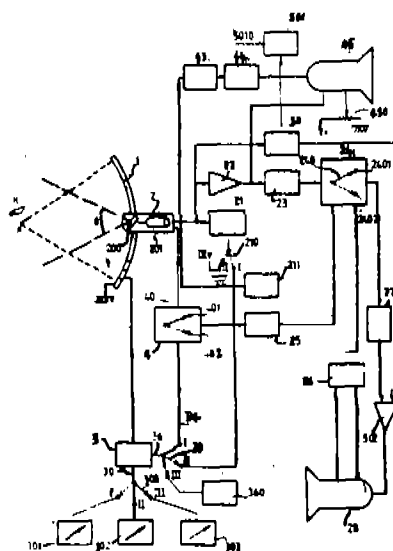
Inventor: JACQUES DORY.

Application for the Patent No. 283/Del/87, filed on 3rd April, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act-1972) Patent office Branch, New Delhi-110005.

7 Claims

A lithotripter for fragmentation of stones and ascertaining the degree of such fragmentation comprising generating means for producing a focused beam of high power pressure wave pulses for reducing a stone into fragments, said generating means (1) having high power transducer means (2,200), electric pulse generating means (3,301) connected to said generating means and echographic means (21-22-28) connected to said generating means and having auxiliary transducer means for generating low power ultrasonic pulses, receiver means connected to said generating means for receiving an auxiliary beam of energy from said auxiliary beam reflected on the stone and the fragments and display means (28), connected to said receiver means (22) for displaying in real time an image of the stone and the fragments, detecting means for detecting the size of the fragments, said detecting means comprising further generating means (303, 360) for generating a further focused beam of periodic pressure wave pulses having a power relatively small as compared to that of the high power pulses but substantially higher than the pioneer of the low power ultrasonic pulses and means (36, 3, 1) for directing said further beam on said fragments, for agitating them, the pulses of said further beam having a recurrent frequency of a few Hz, whereby the deformations undergone by the image of the agitated fragments provides an information relative to their size.



Compl. specn. 13 pages.

Drg. 1 sheet

Ind. Cl.: 10 F
Int. Cl.: F 41 J 5/00

167518

'A SUBMUNITION WHICH IS TO BE SEPARATED FROM AN AERONAUTICAL BODY OVER A TARGET AREA'.

Applicant: AKTIEBOLAGET BOFORS, A JOINT STOCK COMPANY ORGANIZED UNDER THE LAW OF SWEDEN, OF S-691 80 BOFORS, SWEDEN.

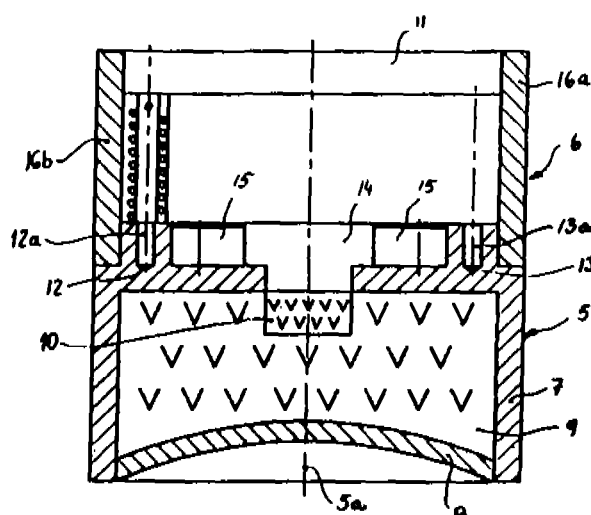
Inventor(s): PER-010 F PERSSON, KJELL ALBREKTSSON, JAN AXINGER, JAN-OLOF FIXELL & JARI HYVARINEN.

Application for the Patent No. 287/Del/87, filed on 3rd April, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act, 1972) Patent office Branch, New Delhi-110005.

4 Claims

A submunition which is to be separated from an aeronautical body over a target area, said submunition comprising a warhead (5), a target detector and means (11, 12a) for imparting rotation to the submunition to enable scanning of the target area in a helical pattern during fall of the submunition towards the target area characterised in that said target detector (6) is pivotally mounted on a mounting shaft (13, 13a) disposed on said warhead (5) said mounting shaft (13) being parallel with an axis of symmetry (5a) of the warhead (5) and enabling said target detector (6) to be activated outwardly between a retracted position in which an optical axis of the target detector (6) coincides with said axis of symmetry (5a) of the warhead (5) to an extended position of said target detector (6) in which the target detector (6) is extended beyond the warhead (5) to permit free vision of the target area; and said means for imparting rotation comprising a carrier surface member (11) pivotally mounted on a further mounting shaft (12) on said warhead (5), said warhead further shaft (12) enabling said carrier surface member (11) to pivot from a retracted position in which the axis of symmetry of said carrier surface member (11) is coincident with the axis of symmetry (5a) of said warhead (5) to an outwardly extended position of said carrier surface member (11) enabling said carrier surface member (11) to impart a controlled rotation and fall speed of the submunition and said target detector (6) to scan the target area in said helical pattern.



Compl. specn. 14 pages.

Drw. 5 Sheets.

Ind. Cl.: 6 B: XLVII (1)
Int. Cl.: H 01 T 17/00

167519

AN APPARATUS FOR GENERATING AN ELECTRIC CORONA DISCHARGE IN AN AIR FLOW DUCT IN COMMUNICATION WITH A HUMAN ENVIRONMENT.

Applicant: ASTRA-VENT AB, A SWEDISH JOINT-STOCK COMPANY, OF ARSTAANGSVAGEN 1 A, S-117 43 STOCKHOLM, SWEDEN.

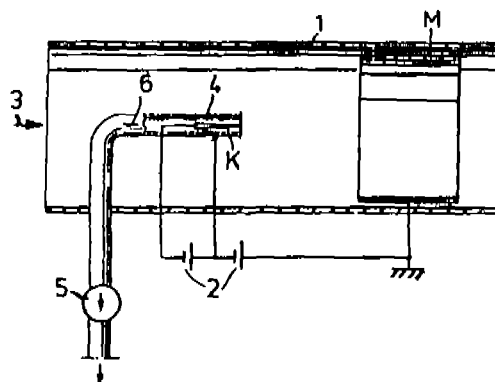
Inventor: VILMOS TOROK, ANDRZEJ LORETH.

Application for the Patent No. 321/Del/87, filed on 14th April, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act, 1972) Patent office Branch, New Delhi-110005.

11 Claims

An apparatus for generating an electric corona discharge in an air flow duct (1) in communication with a human environment, comprising a corona electrode (K) and a target electrode (M) located mutually spaced in said air flow duct (1), and a d.c. voltage source (2) having first and second terminals connected to said corona electrode (K) and said target electrode (M), respectively, to create a corona discharge at said corona electrode (K), characterised by means for continuously removing from the vicinity of said corona electrode (K) any physiologically harmful or irritating substances produced as a consequence of said corona discharge said removal means having a pipe (4, 7, 8, 11) with an orifice at one end thereof located close to and facing said corona electrode (K) and being over the remainder of its length hermetically sealed relative to said air flow duct (1) and air pumping means (5) connected to said pipe for creating a flow of air into said pipe (4, 7, 8, 11) through said orifice closely past said corona electrode (K).



Compl. specn. 14 Pages.

Drw. 1 Sheet.

Ind. Cl.: 167 C
Int. Cl.⁴: B 01 D 35/06

167520

ELECTRICAL DRUM-TYPE SEPARATOR.

Applicant(s): COSUDARSTVENNY PROEKTNO-KONSTRUKTORSKY I EXPERIMENTALNY INSTITUT PO OBOGATITELHONU OBORUDOVANIJU "GIP-ROMASHOBOGASCH ENIE, OF V.O. 18 LINIA, 49, LENINGRAD, U.S.S.R. AND NAUCHNO-ISSLEDOVATELSKY I PROEKTNY INSTITUT OBOGASCHENIA I MEKANIČESKOI OBRABOTKI POLEZNYKH ISKOPAEMYKH (URALMEKHANOB), OF ULITS A KHOHKHRYAKOVA, 87, SVERDLOVSK, U.S.S.R., ALL ARE LIKE 25 SOCIETIES ORGANISED UNDER THE LAWS OF U.S.S.R.

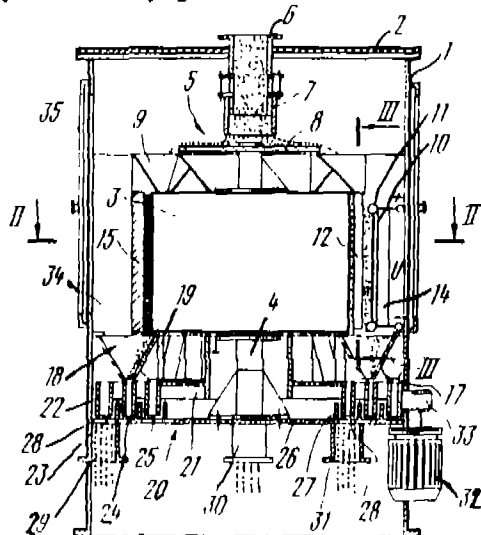
Inventor(s): ANATOLY IVANOVICH URVANTSEV, JURY STEPANOVICH ELANTSEV, ALEXEI MIKHAILOVICH KOHLEV, SALIMAN KHAIROVICH KUSEMBAEV, JURY IVANOVICH STEPANOV, VIKTOR PETROVICH VASILIEV.

Application for the Patent No. 368/Del/87, filed on 28th April, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act, 1972) Patent office Branch, New Delhi-110005.

6 Claims

An electrical drum-type separator for separating a mixture of electrically non-conductive and conductive particles, comprising a housing (1) having a drum (3) mounted therein for rotation about a substantially vertical axis the said drum serving as a precipitation electrode, feeding means (5) mounted in the said housing for feeding a mixture of loose materials onto the peripheral surface of the drum, at least two corona-discharge electrodes (10) spaced from the peripheral surface of the drum and substantially uniformly spaced about the periphery of the drum for charging the particles of the mixture of the loose materials in the electric field set up between each respective corona-discharge electrode and corresponding portion of the peripheral surface of the drum, a plurality of brushes (15) for sweeping non-conductive particles off the peripheral surface of the drum corresponding to each of the corona-discharge electrodes, the brushes (15) being located behind the respective ones of the corona-discharge electrodes substantially uniformly about the periphery of the drum, a group of receptacles (17, 18, 19) located in the respective paths of the streams of electrically conductive particles, aggregates of electrically conductive and non-conductive particles, and non-conductive particles underlying the drum.



Compl. specn. 21 pages

Drig. 1 sheet

Ind. Cl.: 55 E 4 [XIX (1)]
Int. Cl.⁴: 32 F 1 [IX (1)]

167521

A PROCESS FOR THE PREPARATION OF PHARMACOLOGICALLY ACTIVE NOVEL ACYL LABDANE DERIVATIVES.

Applicants: HOECHST INDIA LTD., HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY 400 021, MAHARASHTRA, INDIA.

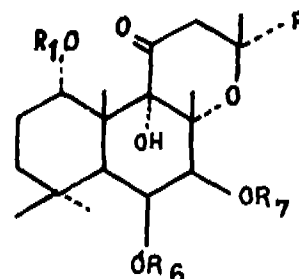
Inventors: (1) DR. YATENDRA KHANDELWAL, (2) MRS. RAJESHWARI KANAN, (3) DR. BANSI LAL, (4) DR. ALLIBHAI NOMANBHAI DOHADWALLA & (5) DR. RICHARD HELMUT RUPP.

Application No. 238/Bom/87, filed on 24th July, 1987.

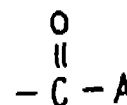
Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, Bombay.

2 Claims

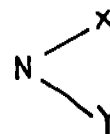
A process for the preparation of pharmacologically active novel acyl labdane derivatives of the Formula I.



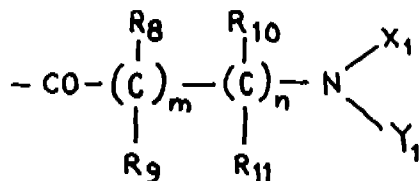
shown in the drawings accompanying the provisional specification, wherein r stands for vinyl, ethyl, cyclopropyl, or CHOHCH₂OH, R₁ stands for hydrogen or a group of the formula R₂R₄R₅ Si, wherein R₁, R₄ and R₅ are each independently alkyl, R₂ stands for a group of the formula shown in fig. 1



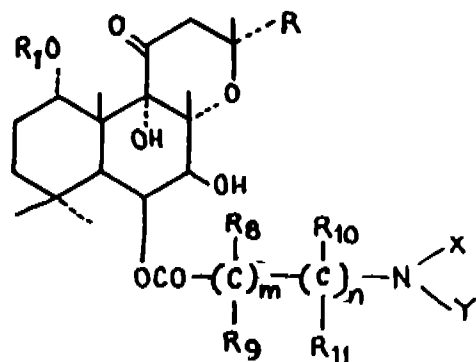
of the drawings accompanying the provisional specification, wherein A stands for OR₂, wherein R₂ stands for alkyl or a stands for the group shown in the fig. 2



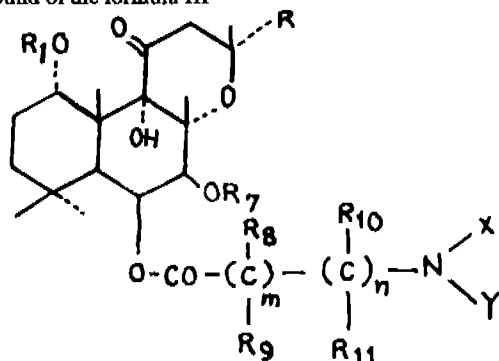
of the drawings accompanying the provisional specification, wherein X stands for hydrogen or alkyl, Y stands for hydrogen, alkyl, substituted alkyl, cycloalkyl, aralkyl, aryl, amino or hydroxy, X and Y together with the nitrogen atom to which they are attached form a heterocyclic ring containing optionally an additional hetero atom and is optionally substituted by alkyl or aryl, R_a stands for a group shown in Fig. 3



of the drawings accompanying the provisional specification, wherein m and n stand for integers 0-10, R_a stands for hydrogen or alkyl, R_8 stands for hydrogen, hydroxy, thiol, alkyl or aryl, R_{10} stands for hydrogen, R_{11} stands for hydrogen, hydroxy or alkyl, X_1 stands for hydrogen when Y_1 stands for hydrogen, alkyl, substituted alkyl, alkanoyl, aryl, cycloalkyl, aralkyl, aryl heterocycle, amino, substituted amino, hydroxy, acyl, dialkylaminoalkyl, carbamoyl, carboxylalkyl or carbalkoxy, alkyl, when X_1 and Y_1 are the same they stand for alkyl, substituted alkyl, aryl or aralkyl, when X_1 stands for alkyl, Y_1 stands for substituted alkyl, cycloalkyl, aralkyl, dialkylamino or alkyl, when X_1 and Y_1 together with the nitrogen atom to which they are attached stand for a heterocycle, it may contain one or more heteroatom(s) which is/are optionally substituted at one or more places by alkyl, aryl, aralkyl, hydroxy alkyl or hydroxy, which comprises reacting a compound of the formula II



shown in the drawings accompanying the provisional specification, wherein R_a stands for a group used for the protection of a hydroxyl group such as t-butyl(dimethylsilyl) and $R-R_8, R_{10}, m, n, X$ and Y have the same meaning as described above, with a compound of formula CI COA, wherein A has the same meaning as described above and 4-dimethylamino pyridine in an organic solvent such as dichloro methane ethylacetate or pyridine at 20° - 70°C to obtain a compound of the formula III



shown in the drawings accompanying the provisional specification, wherein R, R_1, R_7 and $R_a - R_{11}, X, Y, m$ and n have the same meaning as described above, isolating and purifying the compound of the formula III from the respective reaction mixture, treating the compound of the formula III with a reagent such as tetrabutylammonium fluoride at 0-30°C to deprotect the hydroxyl group at position one thereof and to obtain compound of the formula I and isolating and purifying the compound of the formula I from the respective reaction mixture.

Compl. specn. 19 pages

Drg. Nil

Prov. specn. 21 pages

Drg. 3 sheets

Ind. Cl.: 113 I

167522

Int. Cl.: B 60 Q-1/46

A FLASHER UNIT FOR FLASHER DIRECTION INDICATORS FOR MOTOR VEHICLES.

Applicant: BAJAJ AUTO LIMITED, AN INDIAN COMPANY, AKURDI, PUNE 411035, MAHARASHTRA, INDIA.

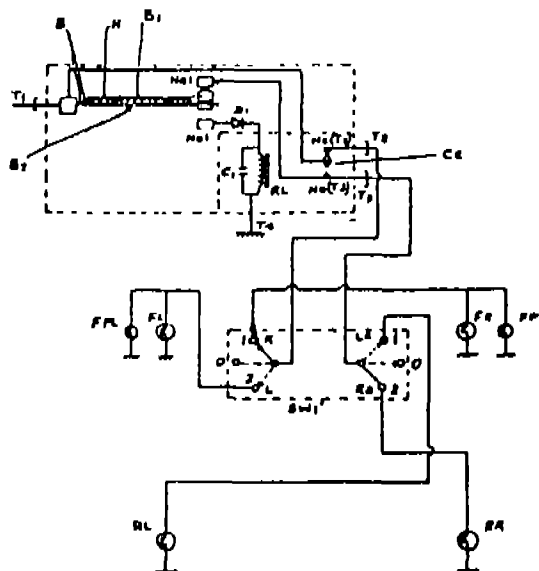
Inventors: (1) MR. TEKMAL DEEPAK GANGADHAR & (2) MR. KULKARNI ANIL CHINTAMAN.

Application No. 382/Bom/87, filed on 29th December, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, Bombay-13.

4 Claims

A flasher unit for flasher direction indicator of motor vehicles comprising a bimetallic strip, a heater coil surrounding the bimetallic strip, both the bimetallic strip and the heater coil being connected at one side to an electric current supply terminals; two contacts on the bimetallic strip, one contact being in electrical contact with an isolated normally closed contact, and the other contact adapted to engage with a normally open contact which is connected to a relay, a second normally closed contact connected to one arm of a change over switch, a second normally open contact, connected to the first mentioned normally closed isolated contact and second arm of said change over switch, a change over contact of the relay being normally in engagement with the said second normally closed contact and adapted to engage with the said second normally open contact, two sets of contacts on said change over switch, one set being connected to two flash indicators on the front side and the other set being connected to two flash indicators on the rear side, each of said arms of the switch being movable from one contact to another to flash the indicators on the right or at the left or to a neutral position.



Compl. specn. 12 pages

Drg. 1 sheet

Ind. Cl. : 189 —LXVI (a)

167523

Int. Cl. : A 61 K—7/16

TOOTHPASTE.

Applicant : HINDUSTAN LEVER LTD, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventors : DR. KURUVAKKAT KOCHU GOVIND MENON, DR. MOHAN JAGANNATH MULKY, MR. RUSI GOVERNOR & DR. KALAPPURAYIL MATHEW CHERIAN.

Application No. 385/Bom/87, filed on 31st December, 1987.

Complete after Provisional left on Sept. 21, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, Bombay.

6 Claims

A toothpaste comprising 1 to 15% by weight of sodium bicarbonate and 0.1 to 1.5% by weight of an alkylaryl sulphonate surfactant and other conventional ingredients such as herein described.

Prov. Specn. 5 Pages.

Drg. Nil.

Compl. specn. 8 pages.

Drg. Nil.

Ind. Cl. : 85 R [XXXI] 108 B 2 (a) [XXXIII (5)]

167524

Int. Cl. : C 21 B—5/06, 7/00

METHOD OF MANUFACTURING MOLTEN PIG IRON BY A BLAST FURNACE.

Applicant : NIPPON KOKAN KABUSHIKI KAISHA, 1-2, 1 CHOME, MARUNOUCHI, CHIYODA KU, TOKYO, JAPAN.

Inventors : (1) YOTARO OONO, (2) KAZUMASA WAKIMOTO, (3) HIROSHI SAITO, (4) HITOSHI KAWADA, (5) TAKE HIKO MIYAMOTO & (6) MASAHIRO MATSUURA.

Application No. 18/Bom/88, filed on 28th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay.

2 Claims

A method of manufacturing molten pig iron by a blast furnace (1) which comprises the steps of:

Charing iron ores (2) and cokes (3) through a furnace top into the blast furnace, and

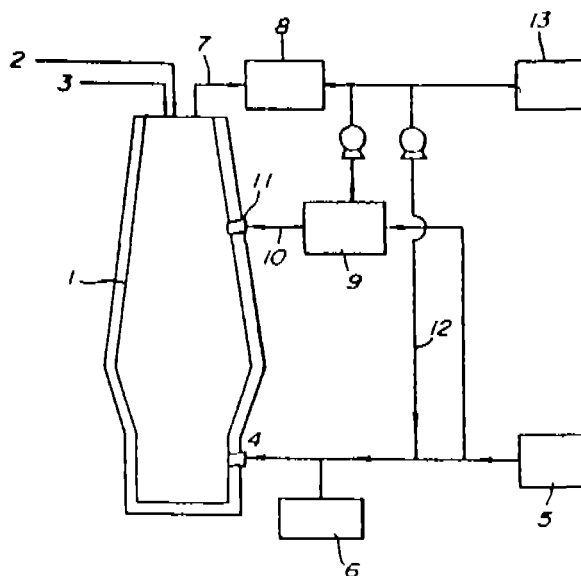
blowing in gas containing 40 Vol.% or more oxygen together with pulverised coal through tuyeres (4) into the blast furnace,

blowing preheating gas (10) through blow-in inlets (11) set at intermediate level in a furnace shaft portion into the blast furnace to pre-heat burdens introduced into the blast furnace,

characterised in that the fuel ratio—the sum of coke ratio and pulverized coal ratio is maintained within a range of 500 to 930 kg/ton., molten pig iron and the ratio of the pulverized coal blown in through the tuyeres is maintained within a range satisfying the formula :

$$100 \text{ to } \frac{530-300}{930-500} (X-500) + 300 \text{ kg/ton., molten}$$

pig iron, where X represents the fuel ratio kg/ton., molten pig iron.



Compl. Specn. 21 Pages

Drg. 3 Sheets

Ind. Cl. : 32 F 1 IX (1) 170 B—XLIII (4),
Int. Cl. : C 11 D 3/39, 3/395

167525

DETERGENT BLEACH COMPOSITION.

Applicant : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventor : ROBERT WILLIAM RILEY HOMPHREYS, STEPHEN ALAN MADISON.

Application No. 60/Bom/88, filed on 10th March, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972) Patent Office Branch, Bombay-13.

17 Claims

A detergent bleach composition comprising :

(i) from 1 to 60% of a peroxygen compound such as herein described capable of yielding hydrogen peroxide in an aqueous solution;

(ii) from 0.1 to 40% of a bleach precursor having the formula I of the accompanying drawings wherein

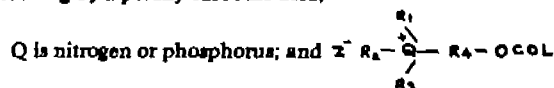
R_1 , R_2 and R_3 are each a radical selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, alkaryl, aryl, phenyl, hydroxyalkyl, polyoxy-alkylene and R_4 OCDL :

or two or more of R_1 , R_2 and R_3 together form an alkyl-substituted or unsubstituted, nitrogen-containing heterocyclic ring system;

or at least one of R_1 , R_2 and R_3 is attached to R_4 to form an alkyl-substituted or unsubstituted, nitrogen-containing heterocyclic ring system;

R_4 is selected from a bridging group consisting of alkylene, cycloalkylene, alkylphenylene, phenylene, arylene, and polyalkoxyethylene and wherein the bridging group can be unsubstituted or substituted with C_1 — C_{10} atoms selected from alkyl, alkenyl, benzyl, phenyl and aryl radicals;

Z^- is a monovalent or multivalent anion leading to charge neutrality when combined with Q^+ in the appropriate ratio and wherein Z^- is sufficiently oxidatively stable not to interfere significantly with bleaching by a peroxy carbonic acid;



L is selected from the group consisting of formulae IIa to IIh wherein :

R_5 and R_6 are a C_1 — C_{12} alkyl group, R_7 is H or R_5 , and y is H or a solubilizing group, selected from $-SO_3^-$, M^+ , $-C_{10}OM^+$, SO_3M^+ , $-N(R_8)X_2NO_2$, OH and $ON(R_8)$ and mixtures thereof; $m+$

is a hydrogen, alkali metal, ammonium or alkyl or hydroxy alkyl substituted ammonium cation. X is a halide, hydroxide, phosphate, sulphate, methyl sulphate or acetate anion.

Compl. Specn. 41 Pages

Drq. 2 Sheets

Ind. Cl. : 189 [LXVI (9)]

167526

Int. Cl. : A 61 K—6/00; 7/16

METHOD FOR THE PREPARATION OF ORAL COMPOSITIONS WHICH INHIBITS THE FORMATION OF DENTAL CALCULUS.

Applicants : HINDUSTAN LEVER LTD. HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400020, MAHARASHTRA, INDIA.

Inventors : GEOFFREY STEWART INGRAM.

Application No. 167/Bom/1988 filed, Jun 9, 1988.

Priority (U.K.) 12-6-87.

12 Claims

A method for the preparation of an oral composition which inhibits the formation of dental calculus, the method comprises blending a linear molecularly dehydrated polyphosphate salt and a Zinc salt, the components being incorporated in suitable amounts so as to provide the following composition.

4—G—317 GI/90

(i) from 0.5 to 7% by weight of the linear molecularly dehydrated polyphosphate salt such as herein described.

(ii) from 0.05 to 2% by weight of the Zinc salt such as herein described.

Compl. Specn. 12 Pages

Drq. Nil.

Ind. Cl. : 42A [XVI]

167527

Int. Cl. : A 24 B 11/00; 3/00

APPARATUS FOR EXPANDING MATERIAL FOR FOODSTUFFS, FAVORITE ITEMS AND THE LIKE.

Applicants : JAPAN TOBACCO INC. 2-1 TO RANOMON, 2-CHOME, MINATO-KU, TOKYO, JAPAN.

Inventors : (1) KENSUKE ICHIHARA, (2) HIROMI ICHIMATSU, (3) MANABU TAKEUCHI & (4) MASSO KOBARI.

Application No. 208/Bom/1988 filed July, 26, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Branch, Bombay-13.

14 Claims

An apparatus for expanding a material such as foodstuffs and favorite items, comprising :

a source for supply of an impregnating agent for impregnating the material to be expanded, the impregnating agent being either in liquid or gaseous phase;

a preparatory vessel arranged below humidifier for receiving the material, said preparatory vessel being open to atmosphere and provided with valve means for substituting air in said preparatory vessel with a gaseous impregnating agent supplied from said impregnating agent source;

an impregnation vessel connected to the preparatory vessel by convey pipe;

supplying means for supplying to said impregnation vessel the impregnating agent from said impregnating agent source and having an impregnation pressure higher than the atmospheric pressure and substituting the interior of said impregnation vessel with the impregnating agent;

conveying means such as screw conveyor for conveying the material from said preparatory vessel to said impregnation vessel through said convey pipe;

valve means forming booster for filling said convey pipe with the impregnating agent source and for, immediately before the material is delivered from said convey pipe to said impregnation vessel, increasing the pressure of the impregnating agent around said material to a pressure substantially equal to be impregnation pressure in said impregnation vessel while the impregnation pressure in said impregnation vessel is kept unchanged.

delivery means, such as delivery pipe one end of which is connected to said impregnation vessel, for guiding out the material impregnated in said impregnation vessel;

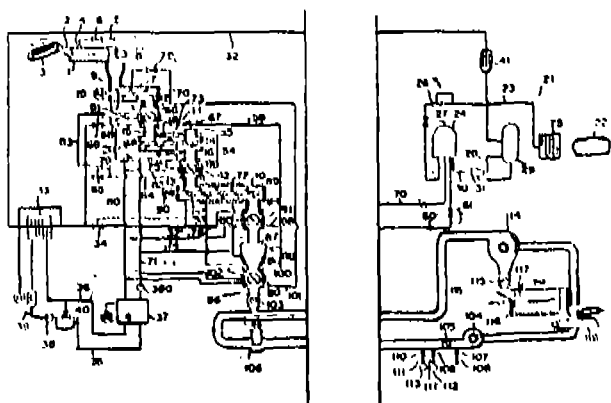
a blow pipe, connected to the other end of said delivery pipe, for blowing out the impregnated material;

delivering means such as a screw conveyor provided in the impregnating vessel for delivering impregnated material from said impregnation vessel to said blow pipe through said delivery pipe;

valve means forming de booster for filling said delivery pipe with the impregnating agent from said impregnating agent source and for, immediately before the impregnated material is discharged from said impregnation vessel to said delivery pipe and to said blow pipe, reducing the pressure of the impregnating agent around said impregnated material to a pressure substantially equal to a pressure in said blow pipe while the impregnation pressure in said impregnation vessel is kept unchanged;

blowing means for generating a flow of a heating medium heated to a predetermined temperature to deliver the impregnated material in said blow pipe; and

a tangential separator connected to the outlet of the blow pipe and a humidifier at the outlet of separator.



Compl. Specn. 57 Pages

Drgs. 10 Sheets.

Ind. Cl. : 189 [LVI (9)]

167528

Int. Cl. : A61K—7/16.

PROCESS FOR THE PREPARATION OF A TOOTHPASTE.

Applicant : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400020, MAHARASHTRA, INDIA.

Inventor : RALPH MARSLAND DUCKWORTH.

Application No. 236/Bom/1988 filed on August 19, 1988.

Priority of U.K. Application filed on 21-8-1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Bombay-13.

7 Claims

A process for the preparation of a toothpaste comprising mixing calcium-free abrasive cleaning agent, an inorganic ionic fluoride, 0.01 to 0.06% by weight of a flavouring agent and 0.002 to 0.1% by weight of sodium saccharinate or the equivalent weight of another sweetening agent.

Compl. Specn. 16 Pages

Drgs. Nil.

Ind. Cl. : 97D+H LIX (2)

167529

Int. Cl. : A47J—39/00, 27/086.

AN IMPROVED COOKING DEVICE.

Applicant : EAGLE FLASK INDUSTRIES PRIVATE LIMITED, (AN INDIAN COMPANY) AT EAGLE ESTATE, TALEGAON 410 507, DIST. PUNE, MAHARASHTRA STATE, INDIA.

Inventor : ALIMOHAMMED CHAGANBHAI PADAMSEE.

Application No. 10/Bom/1989 filed on Jan., 4, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Branch, Bombay-13.

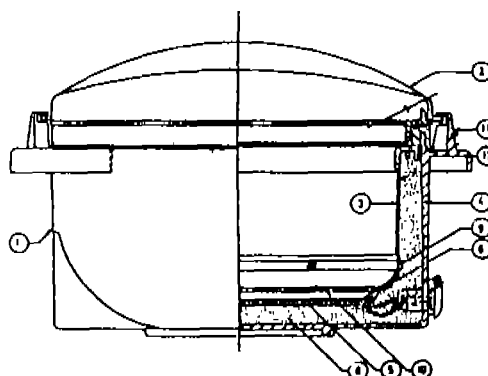
4 Claims

An improved cooking device comprising :

a container member and a lid member, having heat conductive inner wall and an insulated outer wall;

a heating element having a multi layered electrically insulated coating provided at the base, between the said conductive inner wall and insulated outer wall; and

thermal insulation material, such as, polyurathane foam provided between the said inner wall and outer wall.



Compl. Specn. 10 Pages

Drg. 1 Sheet

Ind. Cl.: 127 I [LXV(1)]

167530

Int. Cl.: F 16 D-3/58.

AN IMPROVED FLEXIBLE COUPLING.

Applicant & Inventor: DEORAM KHANDUJI THORAT,
INDIAN NATIONAL OF M/s. D.K. INDUSTRIES, PLOT NO. F-15,
M.I.D.C. AHMEDNAGAR 414 111, MAHARASHTRA,
INDIA.

Application No. 21/Bom/1989 filed January, 23, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972) Patent Office, Branch, Bombay-13.

2 Claims

An improved flexible coupling for co-axially aligned shafts
comprises:

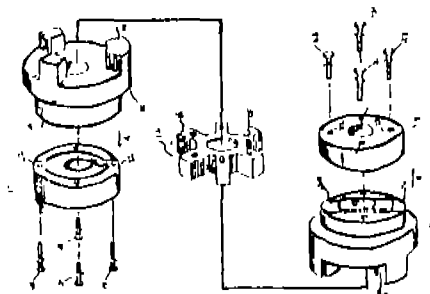
a pair of coupling components having longitudinally projecting
lugs/jaws at the surfaces facing each other, such that said pair of
coupling components may be intermeshed;

a power transmitting member made of materials such as, artificial
rubber, leather, plastic and the like or non resilient and non-com-
pressible materials, such as, metal provide between the said

intermeshed coupling components; and

a pair of adaptors rigidly connected to the surfaces of the said
coupling components opposite to the surfaces having longitudinally
projecting lugs/jaws;

characterised in that the said adaptors are provided with at least a
pair of threaded holes into which a pair of studs or the like are
threaded, which when come into contact with the surfaces of the
coupling components provided force to separate said adaptors from
the coupling components.



Compl. Specn. 8 Pages

Drwg. 1 Sheet

Ind. Cl.: 90-H [GROUP XXXVI]

167531

Int. Cl.: C 03 B 19/10

METHOD AND APPARATUS FOR MAKING SPHERICAL PARTICLES.

Applicant: POTTERS INDUSTRIES INC., 377, ROUTE 17,
HASBROUCK HEIGHTS, NEW JERSEY 07604, U.S.A., A COR-
PORATION OF NEW YORK, U.S.A.

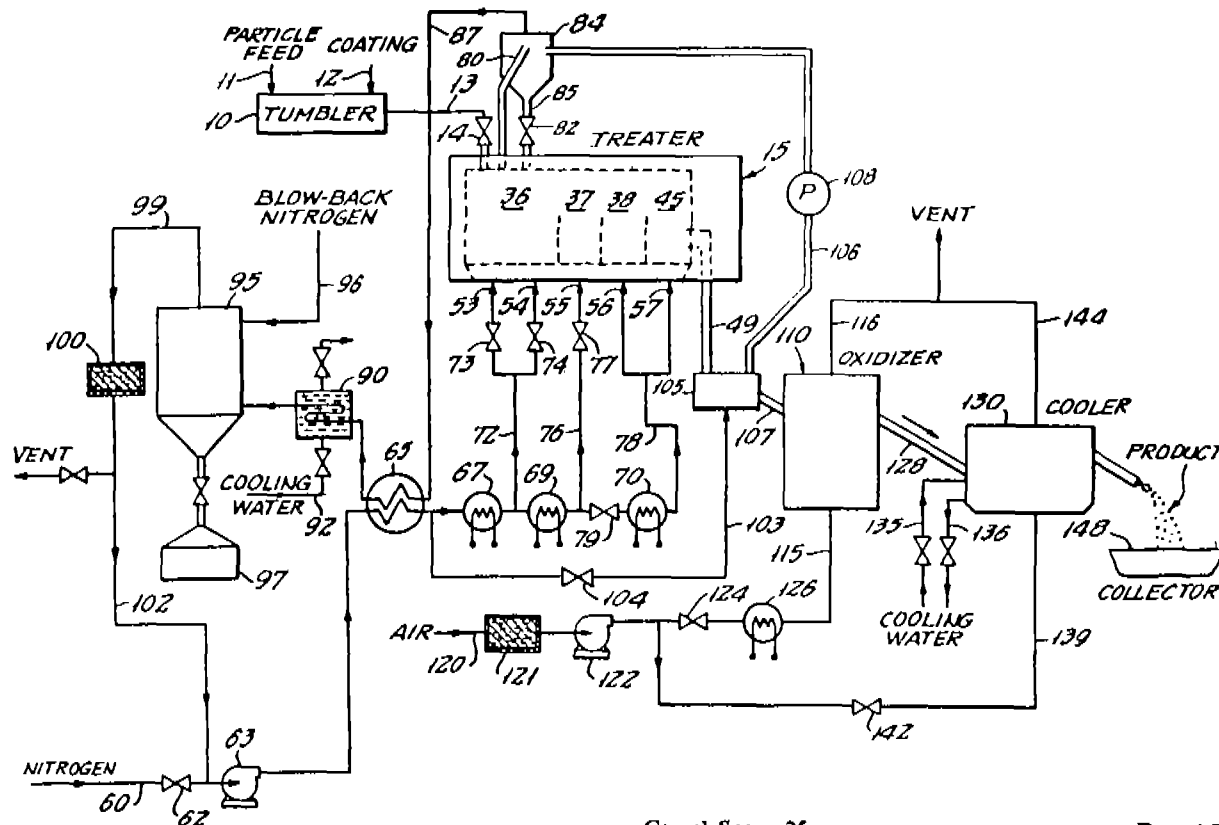
Inventor: RUDOLF M. BRAUN.

Application No. 208/Mas/1988 filed on May 21, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972) Patent Office, Madras Branch.

7 Claims

A process for making spheres from a multiplicity of minute par-
ticles having a diameter range of from 1 micron to 6.0 millimeters
comprising in combination: introducing a multiplicity of the par-
ticles into a fluidizing bed; directing a fluidizing gas into the bed to
suspend the particles therein and thereby fluidize the same, heating
the particles to a temperature of from 400° C to 900° C to shape the par-
ticles into spherical form while in fluidized condition in said bed; and
thereafter cooling the spherical particles while maintaining the par-
ticles in a fluidized condition to cause the setting of the spheres.



Compl. Specn. 25 pages

Drwg. 4 Sheets.

Ind. Cl. : 34 A [GROUP X]

167532

13 Claims

Int. Cl.⁴ : B 29 D 7/01.

A METHOD FOR THE MANUFACTURING OF POLYMER COMPOSITE FILMS.

Applicant: THE DOW CHEMICAL COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventor(s) : (1) JEFFREY DAVID BIRDWELL (2) WILLIAM PAUL CARL (3) BURT EDWIN MORITZ

Application No. 419/Mas/1986 filed on May 28, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

Ind. Cl. : 70 C3 C5 [GROUP LVIII(5)]

167533

Int. Cl.⁴: C 25 B 1/16, 1/26.

PROCESS FOR THE PRODUCTION OF PURE ALKALI METAL CHLORIDE SOLUTION BY ELECTROLYSING AN ALKALI METAL CHLORIDE IN A MEMBRANE CELL

**Applicant : STEARNS ANALYTIC WORLD CORPORATION,
P.O. BOX 5888 DENVER, COLORADO 80217, U.S.A. INCOR-
PORATED IN THE STATE OF DELAWARE.**

Inventor : THOMAS FRANCIS O'BRIEN.

Application No. 403/Mag/86 filed on May, 26, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

5 Claims

Process for the production of pure alkali metal chloride solution by electrolyzing an alkali metal chloride in a membrane cell having at least an anolyte compartment and a catholyte compartment, which method comprises feeding the brine solution to the anolyte compartment, imposing a voltage across the cell thereby evolving chlorine at the anode and an alkali metal hydroxide at the cathode, removing the

A method for the manufacturing of polymer composite films using a removable substrate comprising the steps of:

depositing a composition onto a removable substrate; said composition comprising a perfluorinated polymer such as herein described containing sites convertible to ion exchange groups dissolved in a solvent/dispersant having a boiling point in the range of 30 to 110°C, and a solubility parameter of from 7.1 to 8.2 hildebrands; heating the composition to form and fuse a first polymer film on the substrate; depositing said composition as a second dispersion composition onto the first film; heating the composition to form and fuse a second polymer film; bonding the first film to the second film; thereby forming a composite film by heating at a temperature from 150° to 380°C; and removing the substrate to obtain a polymer composite film.

Compl. Specn. 54 pages

Dr. N.H.

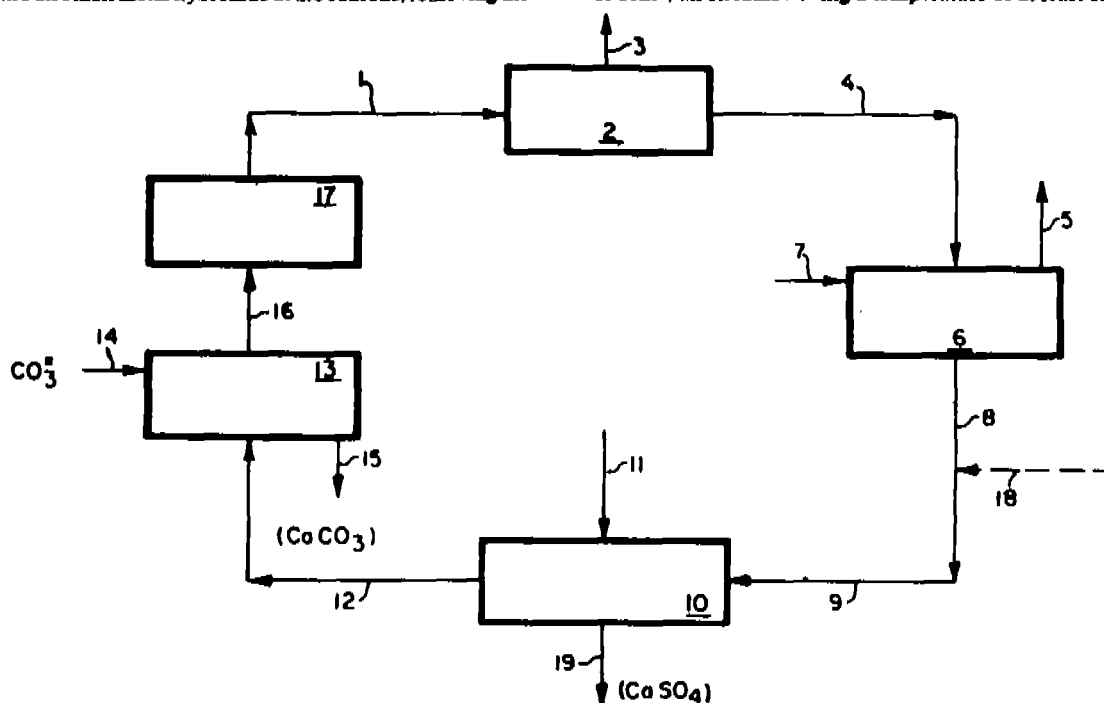
salt-depleted brine solution from the anolyte compartment, separating the chlorine from the salt-depleted brine solution, resaturating the brine solution by contact with impure alkali metal chloride, treating the resaturated brine solution to remove impurities, and recycling the brine solution as feed to the anolyte compartment characterised in that a controlled amount of calcium ion is added to the salt-depleted brine solution, after the solution exists the anolyte compartment and prior to resaturation followed by precipitation of calcium carbonate (CaCO_3) from the brine solution by introducing an alkali metal carbonate after resaturation of the salt-depleted brine solution, wherein the amount of calcium ion added is calculated by the equation :

$$C = 0.124 [10^{(A \log (7.245) + B)} - 7.84(S - R)]$$

wherein $A = (-H) (0.00361) - 0.812$

$$B = (-H) (0.00828) + 3.46$$

wherein "S" is the allowable level of sulfate in the brine exiting from the saturator, expressed as grams of Na_2SO_4 per liter of brine; "R" is the actual steady rate concentration of sulfate in the recycle brine entering the saturator, expressed as grams of Na_2SO_4 per liter of brine; "H" is the salt concentration in the brine exiting from the saturator, expressed as grams of NaCl per 100 cubic centimetres (100 CC) of brine; and "C" is the quantity of calcium ions which must be added to the salt-depleted brine exiting the membrane cells and prior to its introduction into the saturator, expressed as grams of CaCl_2 per liter of brine; all streams having a temperature of at least 15°C .

**Compl. Specn. 14 Pages**

Dwg. 1 Sheet

Ind. Cl.: 152 E [GROUP XII (2)]

167534

Int. Cl.⁴: C 08 L 51/00.**GLASS-FIBER REINFORCED POLYPROPYLENE RESIN COMPOSITION.**

Applicant: MITSUI TOATSU CHEMICALS, INC., A CORPORATION ORGANISED UNDER THE LAWS OF JAPAN, LOCATED AT 2-5 KASUMIGASEKI 3-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors: (1) YOICHI KAWAI (2) MASAMI MAKI (3) KOUTAROU SUZUKI (4) MINORU HOSHINO, (5) MASARU ABE.

Application No. 429/Mas/86 filed on 30th May, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

11 Claims

A glassfibre reinforced polypropylene resin composition comprising 95 to 55 parts by weight of a modified polypropylene resin as a graft polypropylene resin obtained by graft-polymerizing a radically polymerizable unsaturated compound such as herein described onto a crystalline polypropylene resin with an organic peroxide catalyst in a hydrocarbon solvent, and 5 to 45 parts by weight of glass fibers treated with an organic silane compound or an organic titanium compound, the total weight of said modified polypropylene resin and said glass fibers being 100 parts by weight, and further 0.005 to 0.05 part by weight of calcium stearate and 0.01 to 0.07 part by weight of at least one member selected from the group consisting of alkaline earth metal oxides hydroxides, basic salts and basic complex salts.

Compl. Specn. 27 Pages

Drg. Nil

Ind. Cl.: 146 D1 [GROUP XXXVIII (2)]

167535

Int. Cl.⁴: G 02 B 27/02.**A THREE COORDINATE VIEWER FOR USE IN THE STUDY OF PHOTOGRAPHS.**

Applicant: NATIONAL REMOTE SENSING AGENCY, BALANAGAR, HYDERABAD-500037. ANDHRA PRADESH, INDIA, A SOCIETY DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE UNION OF INDIA.

Inventors: (1) BULUSU LAKSHMANA DEEKSHATULU (2) YELLAPPA SAMBAMURTHY (3) TAMMABATHULA SETHA RAO.

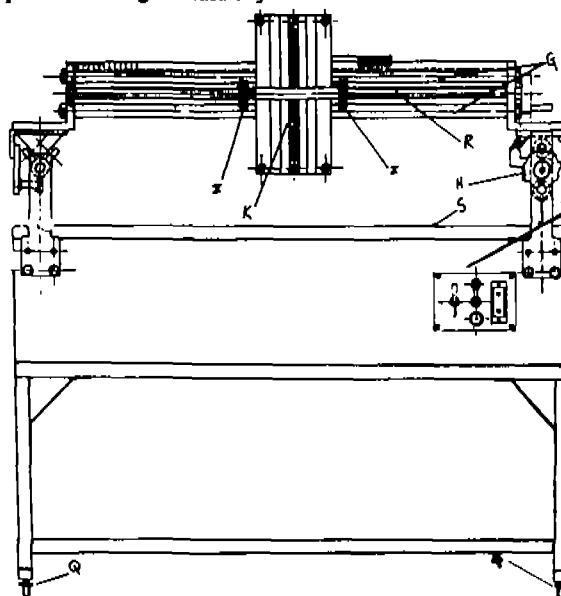
Application No. 444/Mas/86 filed on 9th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

3 Claims

A three coordinate viewer for use in the study of photographs, comprising a table, the table-top incorporating a transport sheet; a light source disposed below the table-top for transmitting light outwardly through the said sheet; a platform for receiving optical apparatus and instruments, such as herein described, the said platform being mounted above the table-top; and means comprising

guide bars and screw rods threadedly engaged with the platform, the said screw rods being rotatable by handles, for moving the platform over predetermined distances in the X and Y coordinate directions and a rack and pinion with a knob for turning the pinion for moving the platform over predetermined distances in the Z coordinate direction, whereby the location of the platform is definable to train the apparatus and instruments on an object placed on the sheet, for the purpose of viewing the said object.



Compl. Specn. 7 Pages

Drg. 2 Sheets

Ind. Cl.: 6 A2 [GROUP XLVII(1)]

167536

Int. Cl.⁴: B 63 B 7/08 35/34**AN AQUATIC VESSEL ASSEMBLY.**

Applicant & Inventor: JOHN M. PALMER, JR., A U.S. CITIZEN OF P.O. BOX 2171, LUTZ, FLORIDA 33549, U.S.A.

Application No. 452/Mas/86 filed on 11th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

13 Claims

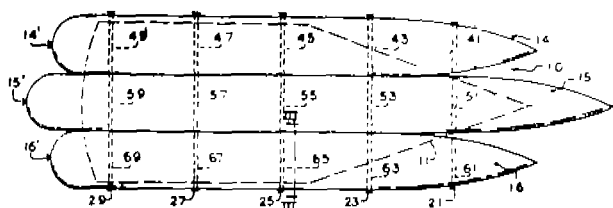
An aquatic vessel assembly characterized by a plurality of inflatable hull envelopes,

each such envelope being provided with a given plurality of transecting sleeves,

each such sleeve is alignable with a sleeve in at least one other of the plurality of inflatable envelopes, and being open-ended, and also being sealed at its ends to opposite sides of its envelope and thereby sealing off the envelope interior from the exterior; and

a like given plurality of tie members,

each such tie member is at least as long as the aggregate length of alignable sleeves in respective envelopes, and being insertable into and removable from such sleeves when aligned.



Compl. specn. 11 pages

Drg. 1 sheet

Ind. Cl.: 139 G [GROUP IV (2)]

167537

Int. Cl.⁴: C 01 B 3/02**MICROBIAL PROCESS FOR HYDROGEN PRODUCTION FROM CELLULOSE.**

Applicant & Inventor: TANNIRKULAM MUDAMBI VATSALA AND VENKATRAMAN BALAJI OF SHRI A.M.M. MURUGAPPA CHETTIAR RESEARCH CENTRE, THARAMANI, MADRAS-600113. TAMIL NADU, OF INDIAN NATIONALITY.

Application No. 640/Mas/86 filed on 4th September, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

3 Claims

A microbial process for production of hydrogen from cellulose comprising the steps of

(a) cultivating a select population of *Rhodospirillum rubrum* ATCC 11170, a species of phototrophic bacteria belonging to the family of Rhodospirillaceae, in a mineral medium such as herein described, with one of the following substances as carbon sources:

- (i) crystalline cellulose
- (ii) amorphous cellulose
- (iii) carboxymethyl cellulose
- (iv) carboxymethyl starch

(b) thereafter, sparging the said medium by bubbling with ultrapure argon gas;

(c) and thereafter, sterilisation of the said medium by autoclaving in the range of 110-125 degree Celsius and 1.2-1.5 kgf for 15-25 minutes;

(d) maintaining the medium and the population of the said *Rhodospirillum rubrum* in it at a temperature range of 26-30 degrees Celsius;

(e) illuminating the medium with the population of the said *Rhodospirillum rubrum* in it with light in the wavelength range of 360-900nm; and

(f) recovering hydrogen evolved from the medium and cells of the said *Rhodospirillum rubrum* in any known manner.

Compl. specn. 6 pages

Drg. Nil

Ind. Cl.: 139 G [GROUP IV (2)]

167538

Int. Cl.⁴: CO 1 B 3/02**MICROBIAL PROCESS FOR HYDROGEN PRODUCTION FROM CELLULOSE IN HIGH SALINE IN WATER MEDIUM.**

Applicant & Inventor: TANNIRKULAM MUDAMBI VATSALA OF SHRI A.M.M. MURUGAPPA CHETTIAR RESEARCH CENTRE, THARAMANI, MADRAS-600113 INDIA, AN INDIAN NATIONAL.

Application No. 671/Mas/86 filed on 16th September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

2 Claims

A microbial process for production of hydrogen from cellulose in a high saline water medium, comprising the steps of

(a) Cultivating a select population of *Rhodospirillum salinarum* ATCC 35394, a marine, thermophilic phototrophic bacterium of the family of Rhodospirillaceae, in a high saline water medium containing of 6-18% w/v of sodium chloride such as herein described, using one of the following substances as carbon sources:

- (i) microcrystalline cellulose
- (ii) DL-malic acid;

(b) thereafter sparging the said medium by bubbling with ultrapure argon gas;

(c) and thereafter, sterilising the said medium by autoclaving in a range of 110-125 degrees Celsius and at a range of 1.2-1.5 kgf for 15-25 minutes;

(d) maintaining the medium with the population of the said *Rhodospirillum Salinarum* in it at a temperature range of 38-42 degrees Celsius, in any known manner;

(e) illuminating the medium with the population of the said *Rhodospirillum Salinarum* in it with light in the wavelength range of 360-900nm; and

(f) recovering hydrogen produced from the medium and the cells of the said *Rhodospirillum Salinarum* in any known manner.

Compl. specn. 5 pages

Drg. Nil

Ind. Cl.: 129 G [GROUP XXXV]

167539

Int. Cl.⁴: F 16 B 37/00.**A DEVICE FOR FIXING RODS, WIRES, ROPES AND THE LIKE IN VERTICAL POSITIONS.**

Applicant: UMESH KORDE, INDIAN NATIONAL 103, HAIMU IKEDA, 3-56-6 IZUMI, SUGINAMI KU, TOKYO 168, JAPAN.

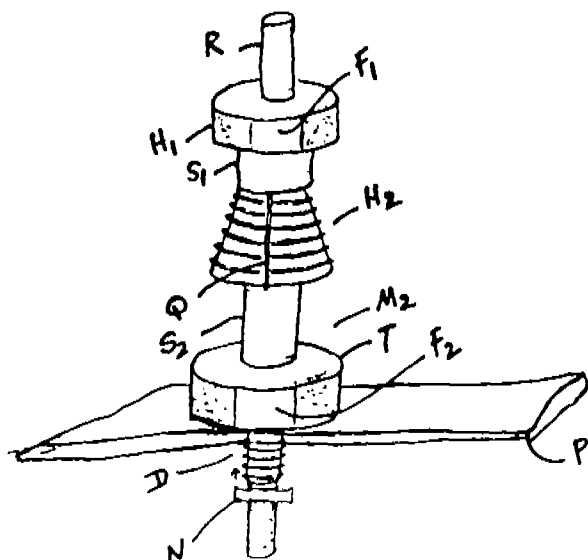
Inventor: IDEM.

Application No. 142/Mas/86 filed on 7th March, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

4 Claims

A device for fixing a rod in a vertical position comprising a first member having first head terminating in a first externally threaded shank with a first central hole of a perimeter larger than that of the cross-section of the said rod, running through the said head and shank; a second member having a second head of tapered externally threaded split-sections, said head being connected by a second shank to a seat terminating in an externally threaded stud with a second central hole of the size of the first central hole running through the second head, second shank, seat and stud, the arrangement being such that the stud is fastenable by a nut to a structural member, to which the said rod is to be disposed vertically, the first shank being threadably engageable with the second head, with the rod passing through the first and second central holes, to grip the said rod, vertically to the structural member, in the constricted split-sections of the second head.



Compl. specn. 7 pages

Drg. 1 sheet

Ind. Cl.: 4-A—[GROUP—LIII(1)]

167540

Int. Cl.: B 64 F 1/02

PORTABLE AIRCRAFT ARRESTING APPARATUS.

Applicant: WICKES MANUFACTURING COMPANY, A CORPORATION OF THE STATE OF DELAWARE, OF 26261 EVERGREEN ROAD, SOUTHFIELD, MICHIGAN 48075, U.S.A.

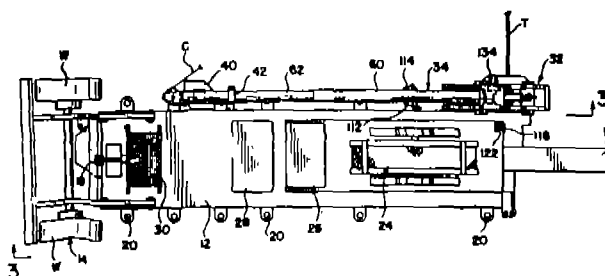
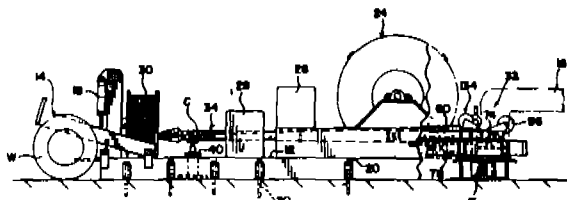
Inventors: (1) PAUL R. BUZBY (2) PAUL D. REID (3) EDMOND A. LOPEZ (4) TERESE C. KELLY

Application No. 255/Maa/86 filed on 1st April, 1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

24 Claims

Portable aircraft arresting apparatus comprising transportable platform means, means including energy absorber means on said platform means for said apparatus to be operable in a cable-type aircraft arresting system, means including said energy absorber means and stanchion mast means on said platform means for said apparatus to be operable in a net-type aircraft arresting system, said stanchion mast means being pivotal about a horizontal axis between horizontal and inclined positions relative to said platform means, and means mounting said stanchion mast means on said platform means for said stanchion mast means in said inclined position to selectively extend in opposite directions relative to said platform means.



Compl. specn. 23 pages

Drgs. 3 sheets

Ind. Cl.: 61 K 42 D [GROUP VIII, XVI]

167541

Int. Cl.: F 26 B 3/10.

A METHOD AND APPARATUS FOR PREPARING AN EXPANDED TOBACCO FROM PARTICULATE TOBACCO.

Applicant: BRITISH-AMERICAN TOBACCO COMPANY LIMITED OF P.O. BOX 482, WESTMINSTER HOUSE, 7 MILL BANK, LONDON SW1 P3 JE, ENGLAND.

Inventors: (1) SAN CAMPBELL BROWN, (2) ROGER WILLIAM HEDGE (3) DAVID JAMES MOLYNEUX.

Application No. 427/Maa/86 filed on 30th May, 1986.

Convention dated 15-6-1985 No. 8515217 (United Kingdom)

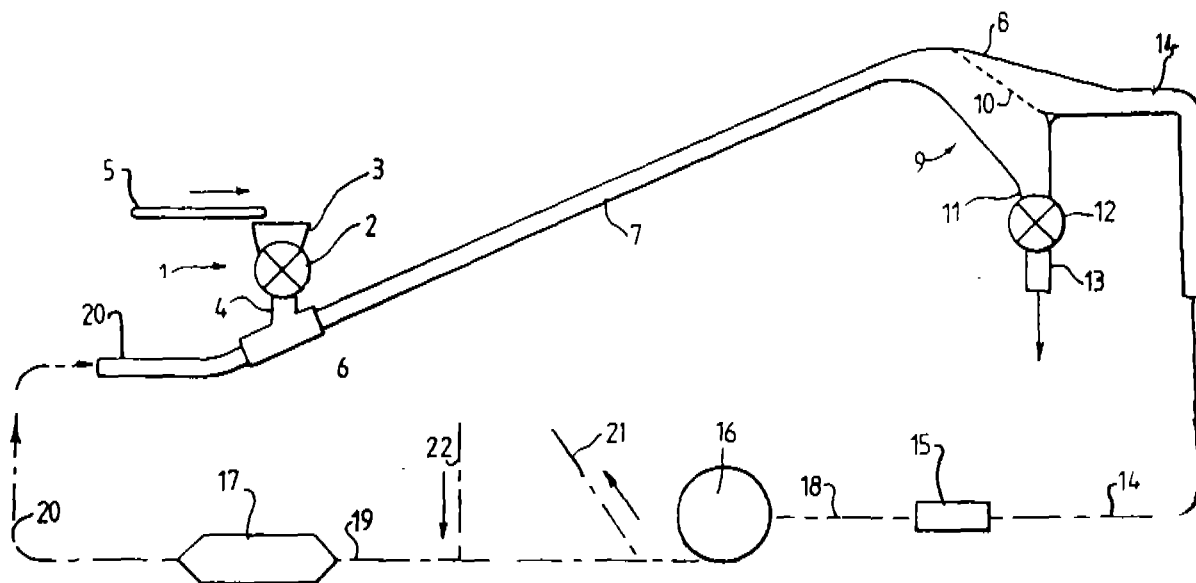
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

8 Claims

An apparatus for preparing an expanded tobacco from particulate tobacco comprising means to supply hot gaseous medium, a transport duct having its upstream end in gas flow communication with said supply means, means to feed particulate tobacco to said duct, and having a gas pervious separation screen housed in a separator casing with gaseous medium inlet and outlet, the said outlet being disposed

generally opposite the gaseous-medium inlet, the said gas pervious separation screen extending across the interior of the casing such that the gaseous-medium inlet and gaseous-medium outlet are at opposite sides of the said screen, and a tobacco outlet at the same side of the

screen as is the gaseous-medium inlet, the gaseous-medium inlet of said separator being in gas flow communication with the downstream end of said duct.



Compl. specn. 12 pages

Dr. 1 sheet

Ind. Cl. : 86 E [GROUP LXVI (4)]

167542

Int. Cl.⁴ : A 47 B 57/00

A HEAVY DUTY ADJUSTABLE RACKING SYSTEM.

Applicant : ARULDOSS PATRICK, TRADING AS SPACE-WAY DESIGN INDUSTRIES, 48/A/153, 4th 'N' BLOCK, RAJAJI NAGAR, BANGALORE-560 010, KARNATAKA STATE, AN INDIAN.

Inventor : ARULDOSS PATRICK.

Application No. 467/Mas/86 filed on 17th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, Madras.

6 Claims

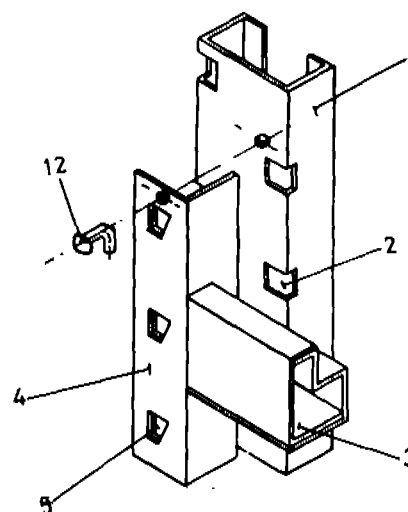
A Heavy Duty adjustable racking system which comprises :

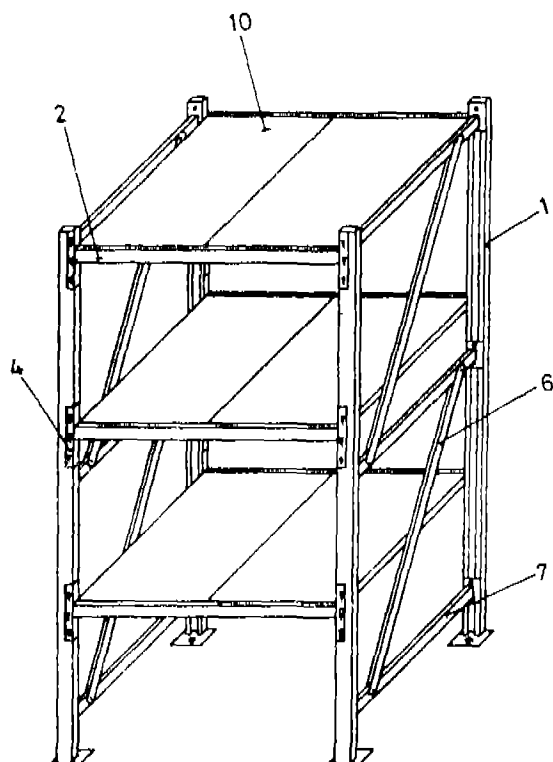
(a) two or more upright columns with column slots arranged in rows, the said slots are in the form of a 'C' section, fully sway braced in manufacture;

(b) cross beams either in the form of a box or stepped type, the ends of the cross beam being welded with end connectors having wedged lugs corresponding to the slots provided, in the upright column, the said cross beams being connected horizontally to the upright columns by placing the wedged lugs of the end connectors in the column slots;

(c) a safety pin being provided in the end connectors which connects the end connector and the column slots and

(d) diagonal and horizontal cross braces being fixed to the upright column rows by known means.





Compl. specn. 8 pages

Drgs. 2 sheets

Ind. Cl.: 32 E [GROUP IX (1)]
Int.Cl.⁴: C 08 F 136/06.

167543.

A PROCESS FOR THE PREPARATION OF 1, 4-CIS POLYBUTADIENE WITH A CATALYTIC SYSTEM

Applicant: ENICHEM ELASTOMERI S.p.A. A COMPANY ORGANISED UNDER THE LAW OF THE ITALIAN REPUBLIC, OF VIA RUGGERO SETTIMO, 55-PALERMO, ITALY

Inventor: (1) SILVANO GORDINI, (2) ANTONIO CARBONARO, (3) STANISLAO SPINA

Application No. 470/Mas/86 filed on 17th June, 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

3 Claims

A process for the preparation of 1, 4-cis polybutadiene with a catalytic system consisting of: (a) at least one neodymium compound selected from among neodymium oxide, neodymium alkoxides, phenates and carboxylates or mixtures thereof with compounds of other rare-earth elements; (b) at least one hydroxyl or carboxyl group containing organic compound or water; (c) at least one non-halogenated organometallic aluminium compound or a hydride thereof and (d) at least one halogenated compound selected from among secondary alkyl halides, tertiary alkyl halides, halides of organic acids, metal halides organometallic halides, hydrogen halides, and halogens, characterized in that it comprises the steps of

initiating the polymerization reaction with an Al/Nd gram atom ratio of from 10:1 to 30:1, and adding a portion of component (c) during the polymerization reaction.

Compl. Specn. 26 Pages.

Drg. One Sheet.

Ind. Cl.: 10 B [GROUP XXXIX (2)]
Int.Cl.⁴: F 42 B 33/00.

167544.

A DEVICE FOR USE IN THE PROCESS FOR PRODUCING EXPLOSIVE OR DETONATING CORDS.

Applicant: DYNAMIT MOBEL AG, OF POSTFACH 1209, 521 TROISDORF, WEST GERMANY, A COMPANY ORGANISED UNDER THE REPUBLIC OF GERMANY.

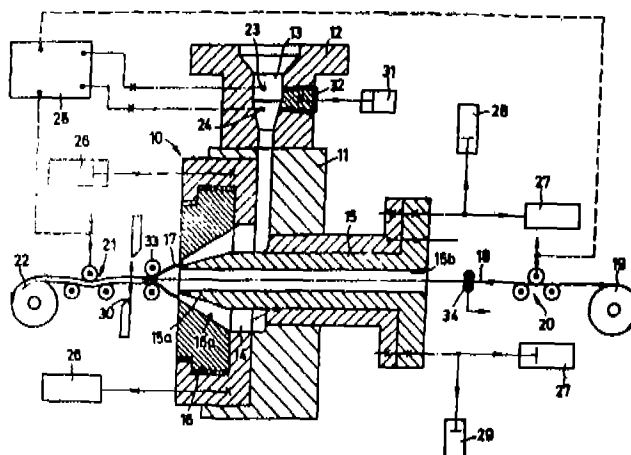
Inventors: HEINZ-ERNST WAGNER, GUNTHER SCHNEIDER

Application No. 472/Mas/86 filed on 17th June, 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

6 Claims

A device for use in the process for producing explosive or detonating cords having a plastic covering comprising a shaping tool consisting of an extrusion nozzle (17) with an inner spindle shaft (15) a duct (15a) for the supply of preliminary cord (18), a mouth-piece (16) surrounding the discharge end of the spindle shaft (15) with radial separation, at least one measuring sensor (23, 24) provided in a supply duct (13) for the plastic leading to the extruder nozzle (17) or at the extruder nozzle (17) and at least one auxiliary drive (26; 27; 29) controlled by the output of the measuring sensor enabling the removal of the spindle shaft (15) and/or the mouth-piece (16) at a predetermined output of the measuring sensor.



Compl. Specn. 11 Pages.

Drg. One Sheet.

Ind. Cl.: 127 A [GROUP LXV (1)]
Int.Cl.⁴: F 16 D 13/00, 13/34.

167545.

A PUSH-TYPE FRICTION DISC CLUTCH ASSEMBLY.

Applicant: DANA CORPORATION, A CORPORATION OF THE STATE OF VIRGINIA, U.S.A. OF 4500 DORR STREET TOLEDO, OHIO 43615, U.S.A.

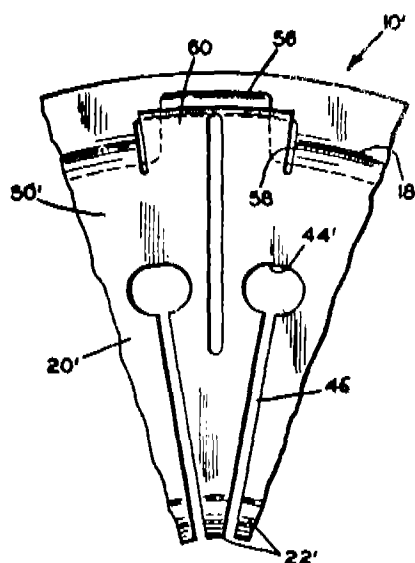
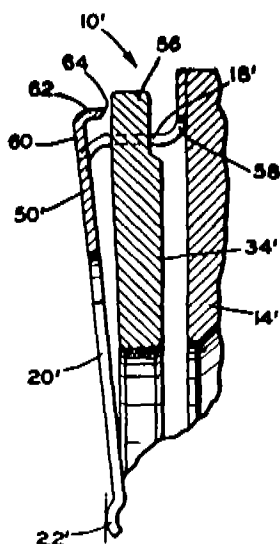
Inventors: RONALD EDWARD HEYMANN, MARTIN EUGENE KUMMER, RICHARD ALLEN FLOTOW.

Application No. 523/Mas/86 filed on 8th July, 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

4 Claims

A push-type friction disc clutch assembly having a flywheel, a pressure plate, a driven disc positioned intermediately of said flywheel and said pressure plate, and adapted for selective frictional engagement of said flywheel, a radially extending Belleville diaphragm spring having outer and inner peripheral portions, said clutch further having a release bearing in constant engagement with said inner peripheral portion, characterized in that said clutch further comprises a mounting portion integrally joined to said diaphragm spring at said outer peripheral portion, said mounting portion rigidly secured to said flywheel, said mounting portion comprising an axially extending portion affixed to said outer peripheral portion, whereby said Belleville diaphragm spring is cantilevered from said mounting portion, and subjected only to bending deflection to effect clutch engagement and release upon axial movement of said release bearing, wherein said clutch has a plurality of circumferentially spaced slots in said mounting portion, a plurality of pressure plate contact extension portions extending radially through said slots, and a plurality of pressure plate contact lugs extending radially outwardly of said diaphragm spring for selective engagement and disengagement of said extension portion by said axial movement of said release bearing.



Compl. Specn. 12 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 70 B [GROUP LVIII(5)]
Int.Cl.: C 25 B 1/10.

167546.

APPARATUS FOR THE ELECTROLYSIS OF SOLUTIONS.

Applicant: METKON S A, A SWISS CORPORATION OF VIA CANTONALE 6855 STABIO SWITZERLAND.

Inventor: GIANCARLO, SIOLI

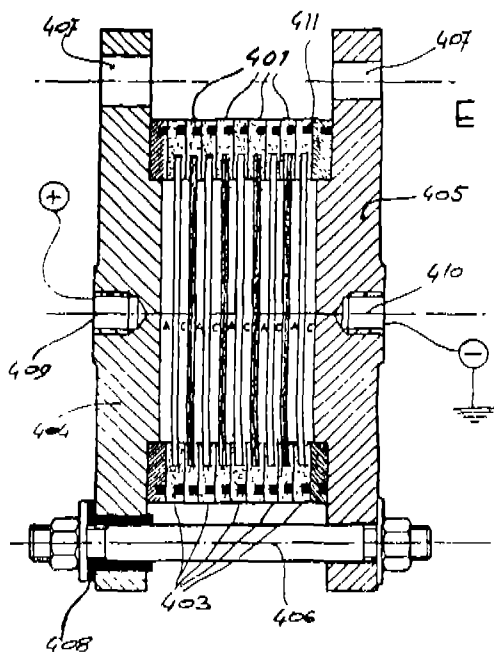
Application No. 548/Mas/86 filed on 16th July, 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

9 Claims

An apparatus for the electrolysis of solutions, comprising a sequence of at least two bipolar elements stacked together between two terminal covers, each of said bipolar elements consisting of a plate or conductive material fitted along its periphery in a frame of electrically insulating material thicker than said plate so as to form at both sides of said plate, cavities for holding electrolyte said cavities being bounded by said conductive plate and by said frame; an electrolyte feed channel comprising a first groove extending over a sector of said frame, said electrolyte feed channel having an inlet port for receiving electrolyte through a feed aperture in said frame, and an outlet port for discharging electrolyte into said cavity through a discharge aperture in said frame; an electrolysis products outlet channel comprising a second groove extending over another sector of said frame, said electrolysis products outlet channel having an inlet port for receiving electrolysis product from said cavity through a feed aperture in said frame, and an outlet port for discharging said electrolysis product through a discharge aperture in said frame; a peripheral gasket in the form of a ring disposed in an annular seat in said frame so as to make a pressure-tight joint between adjacent frames when said frames are stacked against one another; additional apertures in said frame for allowing said electrolyte and said electrolysis product to bypass certain of said cavities as it passes through the electrolyser; and gaskets located in seats surrounding said additional apertures for

minimizing electrolyte and electrolysis leakage from said additional apertures.



Compl. Specn. 30 Pages.

Drgs. 9 Sheets

Ind. Cl. : 127 I [GROUP LXV (1)]

167547.

Int.Cl.⁴ : F 16 D 3/58.

A RESILIENT SHAFT COUPLING.

Applicant : HACKFORTH GmbH & CO. KG OF HEERS-TRASSE 66 4690 HERNE 2 WEST GERMANY; A WEST GERMAN COMPANY.

Inventor : (1) JURGEN WALTER, (2) MANFRED LUNKE, (3) ULRICH FALZ.

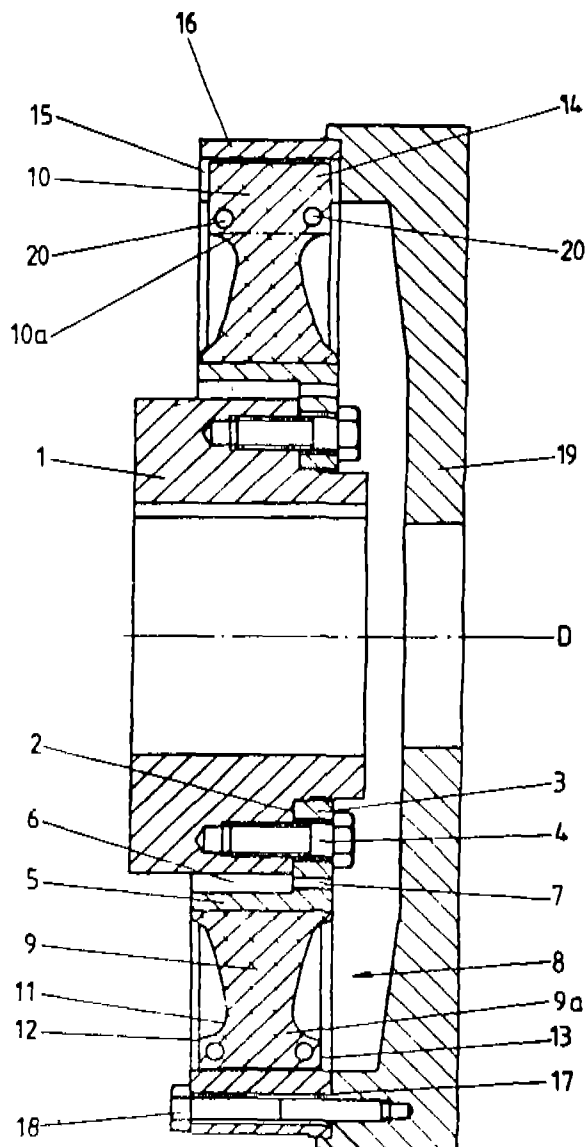
Application No. 875/Maa/86 filed on 7th November, 1986.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

6 Claims

A resilient shaft coupling having a radially internal rigid hub-like part, an outer part and a unitary annular intermediate member made of rubber or a similar substance and operative to transmit torque between the rigid parts, the intermediate member being secured to the inner part, and having on its outer periphery pinion-like toothing meshing, with provision for axial movement, with complementary internal toothing of the outer part, the intermediate member comprising a radially inner zone formed by a member having an axial thickness which decreases radially outwards to ensure substantially constant torsional strength, a short transition zone, and an outer zone which has the toothing on its periphery and whose axial thickness corresponds to the thickness of the inner zone on its inner periphery, the outer zone near its radially internal boundary surface and near to each of the axial external surfaces being reinforced by at least one metal ring defining a closed loop in the circumferential direction

embedded in the rubber concentrically of the rotational axis of the coupling, the rings at the two axial external surfaces being spaced apart to define an intermediate reinforced region of the outer zone.



Compl. Specn. 12 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 32 A 2 [GROUP IX(1)]

167548.

Int.Cl.⁴ : C O 9 B 61/00.

A PROCESS FOR THE PREPARATION OF MONASCUS PIGMENTS.

Applicant : HOECHST AKTIENGESELLSCHAFT, D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY, CHEMICAL MANUFACTURES, A CORPORATION ORGANIZED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. THOMAS BAYER, 2. RAINER BUCHHOLZ, 3. HANS-MATTHIAS DEGER, 4. JOACHIM WINK.

Application No. 473/Mas/88 filed on 6th July, 1988.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

5 Claims

A process for the preparation of *Monascus* pigments comprises culturing a micro-organism of the genus *Monascus* in a sterile fluidized bed of low water content by propagating the said micro-organism in a nutrient medium, continuously removing carbon dioxide and supplying oxygen, until a sufficient quantity of micro-organism is formed, separating the micro-organism from the spent culture broth, fluidizing the said micro-organism by introducing gaseous stream of air or oxygen till the *Monascus* pigment accumulates in the culture and if desired isolating the said pigment in a known manner.

Compl. Specn. 8 Pages.

Drg Nil.

Int. Cl.: 55 E 4 [GROUP XIX (1)]
Int.Cl.4: A 61 K 31/395.

167549.

A METHOD OF MAKING A PHARMACEUTICAL COMPOSITION FOR TREATMENT OF DISEASES OF CENTRAL NERVOUS SYSTEM.

applicant: STATE OF ISRAEL, REPRESENTED BY THE PRIME MINISTER'S OFFICE THE ISRAEL INSTITUTE FOR BIOLOGICAL RESEARCH, OF P.O. BOX 19, NESS-ZIONA, ISRAEL.

Inventors: ABRAHAM FISHER, ISHAI KARTON.

Application No. 555/Mas/88 filed on 2nd August, 1988.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

14 Claims

A method of making a pharmaceutical composition for treatment of diseases of central nervous system comprises mixing together *cis*-2-methylspiro (1, 3-oxathiolan-5, 3') quinuclidine enriched in the levorotatory enantiomer, or a pharmaceutically compatible acid addition salt thereof, with at least one compound having anticholinesterase activity selected from physostigmine and tetrahydroaminoacridine, such that the weight ratio of levorotatory-enriched *cis*-2-methylspiro (1, 3-oxathiolan 5, 3') quinuclidine to anticholinesterase active compound lies within the range of 1:0.5 to 1:10.

Compl. Specn. 25 Pages.

Drg. Nil.

Ind. Cl.: 32 F-2 (b) [GROUP IX (1)]
Int.Cl.4: C 07 D 405/04.

167550.

PROCESS FOR PREPARING 1, 4-DIHYDROPYRIDINE DERIVATIVES AND THEIR ACID ADDITION SALTS.

Applicant: LABORATORIOS DELAGRANGE, OF AVENIDA DE LA INDUSTRIA, 17, 28100 ALCOBENDAS (MADRID), SPAIN, A SPANISH COMPANY.

Inventor: (1) CARLOS FERNANDEZ TORIJA, (2) JOAQUIN ALVARO CALLANO RAMOS.

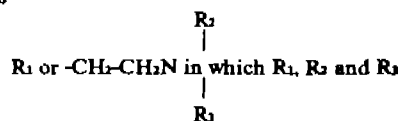
Application No. 556/Mas/88 filed on 3rd August, 1988.

Appropriate Office for Opposition Proceedings (Rules 4, Patents Rules, 1972) Patent Office Branch, Madras.

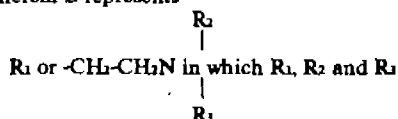
2 Claims

A process for preparing 1, 4-dihydropyridine derivatives of formula (III) of the accompanying drawing and their acid addition salts, wherein R_1 is a linear or branched C_1 - C_4 alkyl group such as methyl, ethyl, propyl, isopropyl, butyl, or isobutyl, R_2 is a C_1 - C_2 alkyl group or a formyl group, R_3 is a hydrogen atom, a formyl, a 2-, 3-, or 4-picolyl, a benzyl, a thienylmethyl or a 4-fluorobenzyl group, with the proviso that R_2 and R_3 are not simultaneously formyl groups, which consists in reacting 2, 3-methylenedioxy benzaldehyde with an acetoacetic

acid ester of formula (IV) of the accompanying drawings wherein A represents

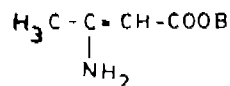
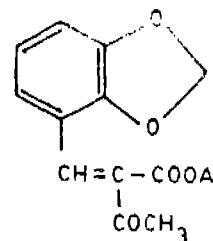
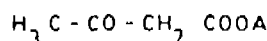
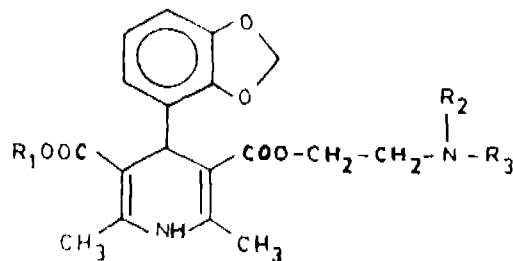


are as defined above, in presence of a solvent such as benzene, at reflux temperature, then in reacting the resulting α -acetyl β -(2, 3-methylenedioxyphenyl) acrylic acid ester of formula (V) of the accompanying drawings, wherein A is as defined above, with a 3-amino crotonic acid ester of formula (VI) of the accompanying drawings, wherein B represents



are as defined above, with the proviso that B is different from A, in presence of a solvent such as isopropanol, at a temperature between 20 and 40°C and if desired converting the said 1, 4-dihydropyridine derivatives to its acid addition salts by known means.

The compounds prepared according to this invention are useful in the treatment of angina pectoris, hypertension and other cardiovascular problems.



Compl. Specn. 26 Pages.

Drg. One Sheet.

Name Index of Application for Patents for the month of February 1990 (Nos. 91/Cal/90 to 185/Cal/90; 25/Bom/90 to 49/Bom/90; 87/Maa/90 to 156/Maa/90; 90/Del/90 to 188/Del/90.

Name & Application No.

CALCUTTA

(91/Cal/90 to 185/Cal/90)

—A—

Alko Limited.—109/Cal/90.

American Cyanamid Co.—105/Cal/90, 106/Cal/90.

American Standard Inc.—94/Cal/90.

APC—Onsite, Inc.—128/Cal/90.

—B—

Baino N.—114/Cal/90, 130/Cal/90.

Bike—O—Matic, Ltd.—100/Cal/90.

BMT Cortec Limited.—155/Cal/90.

Bose Institute.—146/Cal/90.

Burn Standard Co. Ltd.—146/Cal/90.

—C—

Chepelev N.I.—125/Cal/90.

Chugai Denki Kogyo Kabushiki Kaisha.—134/Cal/90.

CIC Systems, Inc.—141/Cal/90.

—D—

Das Gupta S.—177/Cal/90.

Das K. N.—98/Cal/90.

Dermasciences Inc.—143/Cal/90, 144/Cal/90.

Dhar A.—110/Cal/90.

—E—

E.I. Du Pont De Nemours.—124/Cal/90, 152/Cal/90.

Elmwood Packaging Machinery Limited.—149/Cal/90.

—F—

110Fidia S.p.A.—91/Cal/90.

—G—

General Electric Company.—162/Cal/90, 163/Cal/90, 164/Cal/90, 165/Cal/90, 166/Cal/90, 167/Cal/90, 168/Cal/90.

Georg fischer Ag.—119/Cal/90, 179/Cal/90.

Ghimas S.p.A.—175/Cal/90.

Ghosh B.—98/Cal/90.

Golconda Engineering and Mining Services Pty. Ltd.—138/Cal/90.

Graff Dr. R. W. Ing.—108/Cal/90.

—H—

Himont Incorporated.—178/Cal/90.

Hitachi Ltd.—96/Cal/90.

Hoechst Aktiengesellschaft.—95/Cal/90, 156/Cal/90.

—I—

ICI India Ltd.—135/Cal/90.

Institut Problem Modelirovaniya V Energetike Akademii Nauk Ukrainskoi SSR.—148/Cal/90.

Inzhenerny Tsentr Vsesojuznogo Nauchno—Issledovatel'skogo Instituta Po Stroitel'stvu Magistralnykh Truboprovodov USSR.—160/Cal/90, 161/Cal/90.

—J—

Johnson & Johnson.—126/Cal/90, 127/Cal/90.

—K—

Kembla Coal and Coke Pty. Limited.—122/Cal/90.

Kerr-McGee Chemical Corporation.—159/Cal/90.

—L—

Lab S. A.—157/Cal/90.

Laser Technology Co. LP.—115/Cal/90, 171/Cal/90.

Legziel Brothers Ltd.—151/Cal/90.

Linsitorque Corporation.—150/Cal/90.

—M—

MDT Corporation.—139/Cal/90.

Metallgesellschaft Aktiengesellschaft.—103/Cal/90.

Mezhotraslevoi Nauchno-Tekhnicheskyy Komplex "Mikrokhirurgiya Glaza", USSR.—170/Cal/90.

Mitra S. K.—98/Cal/90.

MIU Automation.—172/Cal/90.

Mukherjee Dr. T.—98/Cal/90.

—N—

Nerurkar H. M.—98/Cal/90.

Nisaei Asb Machine Co. Ltd.—180/Cal/90.

—O—

O & K Orenstein & Koppel Ag.—182/Cal/90.

Opti Patent-Forschungs-Und Fabrikations.-Ag.—147/Cal/90.

—W—

Osoboe Kanstruktorskoe Bjuro "Ritm" Pri Tjanganrogskom Radiotekhnicheskome Institute Imeni V. D. Kalmykova USSR.—183/Cal/90.

Westinghouse Electric Corporation.—111/Cal/90, 112/Cal/90, 153/Cal/90, 176/Cal/90.

Wisconsin Alumni Research Foundation.—145/Cal/90.

—P—

Phillips Petroleum Company.—97/Cal/90, 104/Cal/90.

BOMBAY

(25/Bom/90 to 49/Bom/90)

Pinkhusovich G. I.—125/Cal/90.

—B—

Plant Genetics, Inc.—154/Cal/90.

Bahadur V.—32/Bom/90.

Projects & Development (India) Ltd.—117/Cal/90, 118/Cal/90.

—D—

Pyramid Power Systems Limited.—173/Cal/90.

Dubey R.—31/Bom/90.

—R—

RCA Licensing Corporation.—181/Cal/90.

—G—

Richter Gedeon Vegyeszeti Gyar R. T.—184/Cal/90, 185/Cal/90.

Gujarat Narmada Valley Fertilizers Company Ltd.—44/Bom/90.

R. K. S.—142/Cal/90.

—H—

Rohm S.—137/Cal/90.

Hada, R. S.—29/Bom/90.

Rosen H. E.—136/Cal/90.

Hindustan Lever Limited.—38/Bom/90, 47/Bom/90.

Rxs Schrumpftechnik-Garnituren GmbH.—121/Cal/90.

Honeywell-Elac-Nautik GmbH.—43/Bom/90.

—S—

Schmoock H.—92/Cal/90.

—I—

Siemens Aktiengesellschaft.—140/Cal/90.

Ion Exchange (India) Ltd.—40/Bom/90.

Siemens Ltd.—129/Cal/90.

—J—

Sinha H. P.—98/Cal/90.

Jain Manju Umesh Smt.—46/Bom/90.

S. K. F. Textilmaschinen-Komponenten GmbH.—132/Cal/90, 133/Cal/90.

—K—

Strasshei H. Mer.—93/Cal/90.

Kanoddia J. P.—46/Bom/90.

Karmakar Dr. R. S.—35/Bom/90, 39/Bom/90.

—T—

Tata Iron & Steel Co. Ltd.—98/Cal/90.

Konad Doppelmayr & Sohn Maschinenfabrik Gesellschaft m.b.H. & Co. KG.—26/Bom/90.

Tetraflour, Inc.—158/Cal/90.

—M—

Texaco Development Corporation.—113/Cal/90.

Maremont Corporation.—49/Bom/90.

Thomson Consumer Electronics, Inc.—131/Cal/90.

Morparia H. K.—48/Bom/90.

Trutzschler GmbH & Co. Kg.—102/Cal/90, 120/Cal/90.

—O—

Tselkovnev G. M.—25/Cal/90.

Oak P. M.—34/Bom/90.

—P—

—V—

Vac-Tec Systems, Inc.—101/Cal/90.

Parhate S.—41/Bom/90.

Verb Chemiekombinat Bitterfeld.—169/Cal/90, 174/Cal/90.

Patel R. P.—37/Bom/90.

Voeat-Alpine Zeltweg Gesellschaft m.b.H.—99/Cal/90.

Patwardhan S. B.—42/Bom/90.

Plastart Electronics Pvt. Ltd.—28/Bom/90.

—R—

Ranadive H. M.—45/Bom/90.

Rashtriya Chemicals & Fertilizers Ltd.—33/Bom/90.

Remsons Industries Ltd.—30/Bom/90.

—S—

Singhania M.—46/Bom/90.

—T—

Tamhane H. Y.—27/Bom/90.

Tase S. D.—36/Bom/90.

—V—

Vasant B. V.—25/Bom/90.

MADRAS

(87/Mas/90 to 156/Mas/90)

—A—

A. Ahlstrom Corporation.—138/Mas/90.

A. B. Chance Company.—104/Mas/90.

Aparna Fats and Vanaspati (P) Ltd.—122/Mas/90.

—B—

Battelle Memorial Institute.—113/Mas/90.

Bose V. K. J.—117/Mas/90.

—C—

Cabot Corporation.—101/Mas/90, 125/Mas/90, 139/Mas/90.

Cahini F.—105/Mas/90.

Caterpillar Inc.—156/Mas/90.

Charbonnages de France (Establishment Public).—142/Mas/90.

Chelladurai A. N.—150/Mas/90.

Chorpade N.—118/Mas/90.

Chorpade V.—118/Mas/90.

Cogent Limited.—141/Mas/90.

Compagnie Generale Des Etablissements Michelin-Michelin & CIE.—93/Mas/90.

—D—

Damodaran K.—94/Mas/90.

Datron Inc.—154/Mas/90.

Dow Chemical Company The.—145/Mas/90, 146/Mas/90.

DSM Resins B. V.—127/Mas/90.

—F—

Fluid Technology (AUST) Ltd.—140/Mas/90.

Fmit, Inc.—148/Mas/90.

Fosco International Limited.—87/Mas/90.

—G—

Gandhirajan.—102/Mas/90.

GEC Plessey Telecommunications Limited.—124/Mas/90.

Ghorpade N.—143/Mas/90.

Ghorpade V.—143/Mas/90.

Gopi I. M.—91/Mas/90.

Govindasamy P.—119/Mas/90.

—H—

Hedley Purvis Limited.—92/Mas/90.

Henkel Kommanditgesellschaft auf Aktien.—132/Mas/90, 133/Mas/90.

Hennige H.—136/Mas/90.

Himont Incorporated.—100/Mas/90.

Hitachi Zosen Corporation.—97/Mas/90.

HMT Limited.—112/Mas/90.

Huwood Limited.—90/Mas/90, 106/Mas/90, 144/Mas/90.

—I—

Indian Institute of Technology.—120/Mas/90.

Institut Francais Du Petrole.—152/Mas/90.

—J—

Joseph H. J.—99/Mas/90.

J. S. Telecom.—135/Mas/90.

—K—

Kumar P.—98/Mas/90.

—M—

Man Gutehoffnungshutte Aktiengesellschaft.—88/Mas/90.

Mannesmann Aktiengesellschaft.—95/Mas/90, 123/Mas/90.

Maschinen R.—137/Mas/90.

Maschinenfabrik Rieter AG.—89/Mas/90, 110/Mas/90, 114/Mas/90, 153/Mas/90.

Massachusetts Institute of Technology.—115/Mas/90.

Mayer V. P.—107/Mas/90, 108/Mas/90, 109/Mas/90.

Messer Griesheim GmbH.—96/Mas/90.

Millmore Engineering Private Limited.—121/Mas/90.

Minnesota Mining and Manufacturing Company.—126/Mas/90, 131/Mas/90.

Muvek G. V.—130/Mas/90.

—P—

Palitex Project-Company GmbH.—128/Mas/90, 129/Mas/90.

Prasad N. V. S. S.—134/Mas/90.

Pumpen.—137/Mas/90.

—R—

Ramrathan V. R.—143/Mas/90, 118/Mas/90.

—S—

Schlumberger Holdings Limited.—111/Mas/90.

Sedley B. S.—116/Mas/90.

Shepherd D. W.—149/Mas/90.

SMS Schloemann—Siemag Aktiengesellschaft.—155/Mas/90.

Societe des Produits Nestle S. A.—151/Mas/90.

Sridharan S.—147/Mas/90.

Srinivasan R.—118/Mas/90, 143/Mas/90.

—U—

Uhde GmbH.—96/Mas/90.

—Z—

Sellweger Uster AG.—103/Mas/90.

DELHI

(90/Del/90 to 188/Del/90)

—A—

Albright & Wilson Ltd.—161/Del/90.

Alcan International Ltd.—90/Del/90, 91/Del/90, 92/Del/90, 104/Del/90.

Allegheny Ludlum Corporation.—103/Del/90.

Atlas Powder Company.—183/Del/90.

—B—

Bonas Machine Co. Ltd.—108/Del/90.

Bowthorpe Industries Ltd.—105/Del/90.

BP Chemicals Ltd.—115/Del/90, 143/Del/90, 144/Del/90.

British Petroleum Co. PLC.—114/Del/90.

Burlington Industries Inc.—163/Del/90.

BWH Ltd.—180/Del/90.

Challange Industries.—107/Del/90.

Chief Controller Research & Development The.—127/Del/90.

Colgate Palmolive Co.—119/Del/90.

Council of Scientific & Industrial Research.—122/Del/90, 123/Del/90, 124/Del/90, 125/Del/90, 155/Del/90, 156/Del/90, 157/Del/90, 158/Del/90, 159/Del/90, 160/Del/90, 168/Del/90, 169/Del/90, 170/Del/90, 171/Del/90, 172/Del/90, 173/Del/90, 174/Del/90.

—D—

David T. J.—131/Del/90, 132/Del/90, 154/Del/90, 178/Del/90, 179/Del/90.

De La Rue Giori S. A.—130/Del/90.

Deveshwar M.—164/Del/90.

Dorr-Oliver Incorporated.—110/Del/90.

—E—

Ethyl Petroleum Additives Inc.—136/Del/90.

—F—

Finex Handels-GmbH.—116/Del/90.

France G. D.—135/Del/90.

Fuller Co.—120/Del/90.

—G—

Gencorp Inc.—176/Del/90, 177/Del/90.

General Hospital Corporation The.—182/Del/90.

Goodyear Tire & Rubber Co. The.—101/Del/90, 180/Del/90.

Groafillex S. A. R.—150/Del/90, 151/Del/90.

—H—

Harrier GmbH Gesellschaft Fur Den Vertrieb Medizinischer Und Technischer Gerate.—175/Del/90.

—I—

Imperial Chemical Industries PLC.—109/Del/90, 112/Del/90.

International Business Machines Corporation.—152/Del/90.

International Mobile Machines Corporation.—113/Del/90.

—J—
John Crane U. K. Ltd.—145/Del/90.

—K—
Kabelschlepp Gesellschaft Mit Beschränkter Haftung.—128/Del/90.

Kalina A. I.—95/Del/90.

Kannametal Inc.—184/Del/90.

KKKK A/S.—138/Del/90.

Kumar A.—164/Del/90.

—L—
Laboratories Del Dr. Esteve, S. A.—106/Del/90.
Lubrizol Corporation The.—148/Del/90, 188/Del/90.

—M—
Madan A. K.—164/Del/90.
Mathur R. S.—164/Del/90.
McLendon D. C.—111/Del/90.
Montbrun R. G.—162/Del/90.
Motorola Inc.—93/Del/90, 94/Del/90, 147/Del/90.
Mukta—164/Del/90.

—N—
National Institute of Immunology—153/Del/90.

—O—
Orell Fussli Graphische Betriebs AG.—134/Del/90.
Olin Corporation—137/Del/90.

—P—
Pressindustria S.P.A.—140/Del/90, 141/Del/90, 142/Del/90.
Physical Science, Inc.—182/Del/90.

Procter & Gamble Co. The.—121/Del/90, 139/Del/90.

—R—
Rohm and Hoss Co.—187/Del/90.

—S—
Samsonite Corporation—102/Del/90.
Scherrer F.—146/Del/90.

Schonstedt Instrument Co.—129/Del/90.

Shonta International—167/Del/90.

Shriram Institute for Industrial Research—96/Del/90, 97/Del/90, 98/Del/90, 99/Del/90, 100/Del/90.

Sing K. P.—133/Del/90.

Societe D' Etudes De Machines Thermiques S.E.M.T.—117/Del/90.

Steel Authority of India Ltd.—118/Del/90, 166/Del/90.

—T—
Toshiba K. K.—181/Del/90.

TTC Laser Machines (P) Ltd.—165/Del/90

—U—
U. C. Industries, Inc.—185/Del/90.

—W—
Westmard Hill Ltd.—126/Del/90

Wireless Amateurs—149/Del/90.

REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries are the date of registration in the entry.

Class 1. No. 161932. Telefonica De Espana, S. A., a Spanish Company of Gran Via, 2828013, Madrid, Spain "Board Guiding tray for printed circuit boards". March 12, 1990.

Class 1. No. 161950. Pace Marketing Specialities Limited, of IIC Gopala Tower, 25, Rajendra Place, New Delhi-110008, India. "Container". March 19, 1990.

Class 1. No. 162019. Hiten M. Haria of Nehru Road, Santacruz (East), Bombay-400055, Maharashtra, India, Indian. "Kitchen Stand". April 5, 1990.

Class 1. No. 162027. Neeraj Marketing Co., 800/12, Shora Kothi, Clock Tower Subzi Mandi, Delhi-110007, India, Indian Company. "Fan". April 11, 1990.

Class 1. No. 162044. Munna Auto Industries, 3267, Kucha Pandit, Gali Farat Ullah Khan, Lal Kuan, Delhi-110006, India, a Proprietary Concern. "Retrovisors". April 19, 1990.

Class 1. No. 162051. The Babcock & Wilcox Company of 1010 Common Street, New Orleans, Louisiana 70160, USA. "Sootblower Carriage Casting". April 23, 1990.

Class 1. No. 162083. Pradyumna Lohia, Indian National of 112, Chittaranjan Avenue, Calcutta 700073, W. B., India. "Exercising Equipment". May 7, 1990.

Class 1. No. 162111. Expo Appliances Pvt. Ltd., 1594, 3rd Floor, Dariba Kalan, Delhi-110006, India, Indian Company. "Toaster". May 6, 1990.

- Class 3. No. 161915. Eastern Medikit Pvt. Ltd., an Indian Co. of 3, Dr. G. C. Narang Marg, Delhi, India. "I. V. Cannula". March 7, 1990.
- Class 3. No. 161916. Eastern Medikit Pvt. Ltd., an Indian Co. of 3, Dr. G. C. Narang Marg, Delhi, India. "3 way stop cock of I. V. Set." March 7, 1990.
- Class 3. No. 161918. Eastern Medikit Pvt. Ltd., an Indian Co. of 3, Dr. G. C. Narang Marg, Delhi, India. "I. V. Cannula with injection port" March 7, 1990.
- Class 3. No. 161936. Luxor Pen Company Indian Company, 229, Okhla Industrial Estate, Phase III, New Delhi-110020, India. "Refill Holder". March 13, 1990.
- Class 3. No. 161937. Mipak Plastics Pvt. Ltd., 16, Khetan Bhavan, 198, J. Tata Road, Bombay-400020, Maharashtra, India, an Indian Company. "Container". March 14, 1990.
- Class 3. No. 161955. Mickey Toys. Indian Proprietary Firm of 931, Kucha Patti Ram, Bazar Sita Ram, Delhi-110006, India. "Toy Gun". March 20, 1990.
- Class 3. No. 162045. Munna Auto Industries, 3267, Kucha Pandit, Gali Farat Ullah Khan, Lal Kuan, Delhi-110006, India, a Sole Proprietary Firm. "Retrovisors". April 19, 1990.
- Class 3. No. 162066. B. R. Plastics, 314, A to Z Industrial Estate, 3rd floor, Fergusson Road, Bombay-400013, a Registered Partnership Firm "Tooth Comb". April 30, 1990.
- Class 3. 162076. Anzi Enterprises, Indian Partnership Firm, P. O. Jugdia, P.S. Magrahat, Dist. South 24 Pgs., W. B., India. "Dash Board for Motor Car". May 2, 1990.
- Class 3. No. 162079. Farheen Laboratory & Industries, M. B. House, 4th floor, 79, Ghoga Street, Fort, Bombay-1, Maharashtra, India, Indian Proprietary Firm "Bottle". May 3, 1990.
- Class 3. No. 162188. Style Craft Corp., Agarwal Estate "A", S. V. Road, Jogeshwari (West), Bombay 400012, Maharashtra, India, Indian Partnership Firm. "Glass". June 11, 1990.
- Class 3. No. 162323. Hoover Universal Inc., 49200 Halyard Drive, Plymouth, Michigan 48170, U. S. A. "Container". July 16, 1990.
- Class 4. No. 161240. Modern Food Industries (India) Ltd., Palika Bhawan, 3rd floor, R. K. Puram, New Delhi-110066, India, an Indian Co., "Bottle". June 21, 1990.
- Class 4. Nos. 161970 & 161972. Orissa Industries Limited, Indian Company of Uditnagar, Rourkela-769012, Orissa, India. "Refractory Checker block for use in Furnace Regenerators". March 22, 1990.
- Class 4. No. 162123. Trans Eco Pack Systems, Indian Proprietary Firm of Prem Kunj, J. B. Nagar, Andheri (E), Bombay 400059, Maharashtra, India. "Bottles". May 21, 1990.
- Class 10. Nos. 161983 to 161992. Api Polymers (India) Ltd., J-17, Udyog Nagar, Nangloi, Delhi-110041, India, Indian Co. "Shoe". March 29, 1990.
- Class 10. No. 162252. Bata India Limited, 30, Shakespeare Sarani, Calcutta-700017, W. B., India. "Footwear". June 27, 1990.
- Class 12. Nos. 161971 & 161973. Orissa Industries Limited, Indian Co. Uditnagar, Rourkela-769012, Orissa, India. "Refractory checker block for use in Furnace Regenerators". March 22, 1990.

R. A. ACHARYA,
Controller General of Patents,
Designs and Trade Marks.

प्र० मा० सं० मु० फ०—जी० 317 जी० आई०/90—300.

MGIPF—G—317 GI/90—300.